



---

# Planetary Health Report Card (Medicine):

*Chobanian & Avedisian School of  
Medicine (Boston University)*

---



Chobanian & Avedisian  
School of Medicine

2024-2025 Contributing Team:

- Students: *Catherine Sutton, Sandhya Iyer, Nicole Oppenheim, Jessica Czapla, Annika Kamath, Anshika Gupta, Rohith Ryali, Matthew Krick*
- Faculty Mentors: *Dr. Molly Cohen-Osher*

\*Primary Contact: *Catherine Sutton, [cwsutton@bu.edu](mailto:cwsutton@bu.edu)*

Land acknowledgment: We acknowledge that Boston University is on what was originally the territory of the Wampanoag Nation. We respectfully note that Indigenous peoples were stewards of the land and sea where BUMC resides. We regret that Indigenous peoples were brutally subjected to genocide and removal from this area. We pledge to honor the rich traditions of the Indigenous peoples of the US with gratitude by pursuing our activities with respect for life in all its forms and manifestations.

## Summary of Findings

Overall Grade	B
Curriculum	B
<ul style="list-style-type: none"> <li>The Boston University School of Medicine (BUSM) Planetary Health Curriculum recently underwent a significant curriculum redesign and has been actively working to include more planetary health material in the curriculum. In particular, there is now a Community and Environmental health track that emphasizes these topics further, with a unique focus on the disparate impacts of climate change on underserved communities in the Boston area.</li> <li><b>Recommendations:</b> BUSM should continue the work of reaching out to lecturers and clinical educators about including relevant planetary health or sustainability information in their lessons. The material on environmental health could be expanded to teach more broadly about the health impacts of climate change including changing vector ecology, indigenous sustainable practices, and the environmental impact of healthcare.</li> </ul>	
Interdisciplinary Research	B
<ul style="list-style-type: none"> <li>Boston University School of Public Health (BUSPH) Center for Climate and Health has a robust program focusing on interdisciplinary research in planetary health.</li> <li><b>Recommendations:</b> BUSM could collaborate with the Office of Sustainability and the BUSPH to centralize resources related to health and the environment in a medical school-specific context. Additionally, the medical school should consider joining the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education.</li> </ul>	
Community Outreach and Advocacy	C
<ul style="list-style-type: none"> <li>Boston University as a whole has connections with sustainability organizations in the community (i.e. the Food Kitchen, BMC Garden, etc.) and BUSM prides itself on community outreach, but has few partnerships specifically focused on planetary health.</li> <li><b>Recommendations:</b> BUSM could partner with more environmental organizations in the region to offer students volunteer and activism opportunities. The institution could also publish accessible, patient-centered information about the health impacts of climate change and environmental exposures.</li> </ul>	
Support for Student-Led Initiatives	A
<ul style="list-style-type: none"> <li>The institution is very supportive of student-led initiatives. Multiple funding opportunities, research programs, student organizations, and planetary health programs are available to support these initiatives.</li> <li><b>Recommendations:</b> To increase support, the medical school should publish their own website to help students identify planetary health projects, mentors, or volunteer opportunities. They could also increase support for the Outdoors Club, Climate Action Group, and other student-led planetary health groups.</li> </ul>	
Campus Sustainability	B
<ul style="list-style-type: none"> <li>Sustainability is a main area of focus for Boston University, which has a robust Climate Action Plan with goals to be carbon neutral by 2040 as well as a Zero Waste Plan. Major successes have included a commitment to divest from fossil fuels and procurement guidelines that focus on sustainable purchasing.</li> <li><b>Recommendations:</b> The Office of Sustainability could expand its presence on the medical campus. More specifically, BUSM should continue to create, implement and enforce guidelines for sustainability for our student groups and food vendors on campus.</li> </ul>	

# Statement of Purpose

*Planetary health is human health.*

The Planetary Health Alliance describes planetary health as “a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth’s natural systems on human health and all life on Earth.” This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanisation, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment, and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change “the greatest threat to global health in the 21st century,” many medical school’s institutional priorities do not reflect the urgency of this danger to human health.

As future health professionals, we must be prepared to address the impacts of human-caused environmental changes on our patients’ health. This preparation is in the hands of the institutions providing our medical training. It is imperative that we hold our institutions accountable for educating medical students about the health impacts of climate change and other anthropogenic environmental changes, generating research to better understand health impacts and solutions, supporting related student initiatives, embracing sustainable practices as much as possible, and engaging with surrounding communities that are most affected by environmental threats. Because climate change and environmental threats disproportionately affect vulnerable populations (for example, communities of colour, older adults sensitive to health threats, and individuals in low-resource settings), these issues are inherently ones of equity and justice.

With the purpose of increasing planetary health awareness and accountability among health professional schools, we have created a Planetary Health Report Card that students internationally can use to grade and compare their institutions on an annual basis. This student-driven initiative aims to compare health professional schools nationally and internationally on the basis of discrete metrics in five main category areas: 1) planetary health curriculum, 2) interdisciplinary research in health and environment, 3) university support for student planetary health initiatives, and 4) community outreach centred on environmental health impacts 5) medical school campus sustainability.

# Instructions for Completing the PHRC

**Thank you!** We are really pleased to have you and your team on board to complete the PHRC at your institution. Many of you will have already been part of a completed report card or even lead the team at your school but please take a moment to read the instructions below.

For a full comprehensive step-by-step guide to completing your report card please refer to the PHRC User Guide. This page serves as a brief overview of the important methodology.

## Completing the report card:

The Planetary Health Report Card is a self assessment tool designed to identify an institution's strengths and areas in need of improvement in regards to its planetary health education. The metric-based report card consists of five sections; 1. Curriculum, 2. Interdisciplinary Research, 3. Community Outreach, 4. Support for Student-Led Initiatives and 5. Campus Sustainability.

- **Metrics.** There are roughly 55 metrics (depending on your discipline). Sections 2-5 are the same across all disciplines. Each metric has different criteria for either scoring 1, 2 or 3 points. Participants should read each metric carefully and answer the question with as much accuracy as possible, drawing upon multiple sources where possible. It is vital sufficient investigation is completed for each metric to give a fair and accurate representation of your institution.

Most of the Curriculum metrics are graded by inclusion in **elective** coursework, **brief** coverage in the **core curriculum** or **in depth** coverage in the **core curriculum**.

**Elective coursework:** This score applies to material that is actively selected by the students such as a module choice, or additional lecture series. By implication, only a given proportion of the cohort will receive this taught material.

**Brief coverage in the core curriculum:** This score applies where a topic is covered only briefly in a core curriculum session. This implies that the entire cohort receives the same material. Brief inclusion would qualify as inclusion in a single lecture slide in a single year.

**In depth coverage in the core curriculum:** This score applies where a topic is taught in significant detail or where a topic is repeatedly brought up in different years. This might look like several dedicated lecture slides, or inclusion of the same topic in different lectures and teaching formats. Please consider amongst your team that this is the highest score awarded and a subjective decision must be made as to whether the topic should be awarded this score.

(A full list of definitions is provided on the below pages)

- **Types of evidence.** Acceptable forms of evidence include: lecture titles, learning objectives, module descriptions, descriptions of the intended learning, case titles, seminar titles, project titles, webpages, researcher profiles / biographies, news articles, publications, social media output, institutional policy documents. Please be as specific as possible.

It is essential that you have clearly justified the score for each metric, outlining in the box provided the specific content delivered in your curriculum and why you have assigned the

score. Each report card is reviewed by a member of the leadership team for accuracy and consistency across report cards. An example of the sufficient level of evidence is provided below each metric.

Please do not include **lecturers' names** without permission. The title of the lecture or module with a brief description of the material will suffice.

Where material is publicly available via an institution's website, please include hyperlinks to the webpages.

- **Evidence deadline.** Any material from the previous academic year and the current academic year up to the draft deadline of the **17th February 2025** may be included in this report card. Any teaching planned after this date should not be scored in this report card but can be included in the 2025/26 report. You may wish to make a note of any such teaching for your colleagues producing next year's report card.

# Definitions & Other Considerations

## Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as “the health of human civilisation and the state of the natural systems on which it depends.” For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional ‘environmental health’ examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of medical school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term “planetary health” to satisfy the metric.
- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- **Education for Sustainable Healthcare (ESH):** is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
  1. Describe how the environment and human health interact at different levels.
  2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
  3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **Medical School/Department vs. Institution:** When “Medical school” is specified in the report card, this only refers to curriculum and resources offered by the School/department of Medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when “institution” is specified in the report card, we are referring to the university more broadly including all of its campuses. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is

specifically targeted for medical students, can meet this metric.

- **Environmental history (Metric #19 in Curriculum Section):** This is a series of questions students are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.
- **Elective:** The word "elective" refers to an optional course or lecture series that a medical student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Core Curriculum:** This refers to taught material that is delivered to the entire cohort of students in one year.
- **Clerkship / Outreach:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.
- **Clinical rotation:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).
- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.
- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.
- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.
- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to

the historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.

- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.
- **Low socioeconomic status (SES):** An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.
- **Low and Middle-Income Countries (LMIC):** Countries that have lower degrees of economic affluence.
- **Anthropogenic:** Created through human activity
- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

**Other considerations:**

- If there are more than one “tracks” at your institution with two different curricula (for example, Harvard Medical School has a Pathways and HST curriculum track), you can choose to fill out a report card for each track, or fill out just one report card and average the scores received by each track in cases where the scores are different (see the 2021 Harvard or Oxford report cards as examples). Where possible please indicate the proportion of students that are on each track.

Completed in 2022 a [Literature Review by Metric](#) is available for the 2022 medicine report card metrics. We are in the process of updating this review and making it more applicable to all the disciplines. However the review serves as a rough collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

# Planetary Health Curriculum

***Section Overview:*** *This section evaluates the integration of relevant planetary health topics into the medical school curriculum. Today's medical students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that medical students are trained to understand the health effects of these changes, as well as planetary health issues and principles more broadly. Topics like the changing geography of vector-borne diseases, the health consequences of air pollution, environmental health inequities, and disaster response principles must be part of every medical school's core curriculum.*

## ***Curriculum: General***

<b>1.1. Did your <u>medical school</u> offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?</b>	
Yes, the medical school has offered <b>more than one</b> elective whose primary focus is ESH/planetary health in the past year. (3 points)	
Yes, the medical school has offered <b>one</b> elective whose primary focus is ESH/planetary health in the past year. (2 points)	
The medical school does <b>not</b> have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a <b>lecture</b> on planetary health. (1 points)	
No, the medical school has <b>not</b> offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points)	
Score Assigned:	2
<i>Score explanation:</i> <i>Within the LEADS program (Learn, Experience Advocate, Discover, and Serve), there is a public health awareness track focusing on environmental impacts on public health and developed into a 12 week curriculum that is available and optional for students to engage in during their first and second years. This track is complete with a team-based project proposal and active initiative that engages students with the wider academic community at the school and surrounding areas to make an impact on patient care through a lens of environmental justice and awareness. Additionally, ESH is covered at the beginning of the LEADS curriculum track, which is mandatory for all first and second year medical students. During this time, students spend a few days learning about the impact of environmental health on their patient population through lectures and clinical vignettes.</i>	

## ***Curriculum: Health Effects of Climate Change***

<b>1.2. Does your <u>medical school</u> curriculum address the relationship between extreme heat, health risks, and climate change?</b>
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)

This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	2
<i>Score explanation: First-year students are introduced to climate-change oriented cases in their core Pulmonary module. Furthermore, as a part of LEADS health equity week, first year students discuss the health disparities that result from unequal distribution of protective factors against extreme heat, like parks and tree canopy. LEADS also includes elective offerings like community and environmental health in which this topic is addressed further.</i>	

<b>1.3. Does your <u>medical school</u> curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?</b>	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3
<i>Score explanation:</i> <i>During the first year curriculum, pre-lecture coursework and an in-class lecture focused on the health impact of extreme weather such as flooding and heat waves. Secondary health hazards as a result of extreme weather events, such as mold growth after a flood exacerbating asthma, was also discussed during a class in the pulmonary module. In addition, second year students discuss a case of heat stroke and the effect of extreme heat on health.</i>	

<b>1.4. Does your <u>medical school</u> curriculum address the impact of climate change on the changing patterns of infectious diseases?</b>	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	2
<i>Score explanation:</i>	

*The relationship between climate change and changes in vector ecology was briefly covered in pre-lecture coursework on environmental health.*

**1.5. Does your medical school curriculum address the respiratory health effects of climate change and air pollution?**

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

3

*Score explanation:*

*First-year students engage in a lecture on the impact of climate change and air pollution on respiratory health, especially as it relates to redlining in the Boston area. The cumulative effects of air pollution exposure on the development of restrictive lung disease was covered in the pulmonary module. There is a LEADS session focusing on tree cover, rising temperature, heat maps, flooding and impact on respiratory conditions like asthma. The LEADS track Community and Environmental Health covers this topic in greater detail.*

**1.6. Does your medical school curriculum address the cardiovascular health effects of climate change, including increased heat**

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

3

*Score explanation:*

*In the Emergency Medicine section of the second-year curriculum, students are given a publication on the health impacts of increased heat. During class, students work through a case in which a patient suffers from heat stroke and examine the physiological effects of heat on the body. There was an emphasis on the vasodilatory response as well as the impact of heat stroke on the cardiopulmonary system.*

**1.7. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?**

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

2

*Score explanation:*

*During the Psychology module in second year, students learned about the patterns of mental health diagnoses in patients exposed to major climate disasters.*

**1.8. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?**

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

3

*Score explanation:*

*Food insecurity and its impact on health is addressed through a simulated patient interview during the Doctoring course. In addition, the effects of climate change and the ecosystem on health was covered in both LEADS and the pulmonary module in PISCES. The elective Environmental and Community Health track delves into this topic in greater detail.*

**1.9. Does your medical school curriculum address the outsized impact of climate change on marginalised populations such as those with low SES, women, communities of colour, Indigenous communities, children, homeless populations, and older adults?**

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:	3
<i>Score explanation: As a part of LEADS Health Equity week, first year students discuss the health disparities that result from unequal distribution of protective factors against extreme heat, like parks and tree canopy. During the pulmonary module, students engage in a lecture on the disparate impact of climate change and air pollution as a result of environmental racism, especially as it relates to redlining in the Boston area. This topic is addressed further in the Community and Environmental Health elective track.</i>	

<b>1.10. Does your <u>medical school</u> curriculum address the unequal regional health impacts of climate change globally?</b>	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum.	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum.	
This topic was covered in <b>elective</b> coursework.	
This topic was <b>not</b> covered.	
Score Assigned:	1
<i>Score explanation:</i> <i>This topic was covered in the Global and Refugee Health and Community and Environmental Health LEADS elective tracks, focusing on the impact of heat waves and floods globally. However, the inequalities among certain regions were not as heavily emphasized.</i>	

***Curriculum: Environmental Health & the Effects of Anthropogenic Toxins on Human Health***

<b>1.11. Does your <u>medical school</u> curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?</b>	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum.	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum.	
This topic was covered in <b>elective</b> coursework.	
This topic was <b>not</b> covered.	
Score Assigned:	2
<i>Score explanation:</i> <i>First year students briefly learn about environmental teratogen exposure through lecture material on developmental genetics during the Foundations 3 module. The reproduction unit goes into detail on the teratogenic effect of various medications but doesn't delve deeply into environmental risks.</i>	

**1.12. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?**

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

3

*Score explanation:*

*Human-caused environmental dangers are discussed multiple times throughout the core curriculum. In the LEADS curriculum, first year medical students covered topics such as health inequity, environmental racism, and redlining in Boston. The first year students also visited nearby health centers to learn about the environmental threats that impact the community surrounding the hospital.*

**1.13. To what extent does your medical school emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?**

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

0

*Score explanation:*

*The curriculum doesn't cover this topic in class sessions or lecture materials.*

**1.14. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalised populations such as those with low SES, women, communities of colour, children, homeless populations, Indigenous populations, and older adults?**

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:	3
<i>Score explanation: In the Pulmonary module, pre-work for class includes a module that covers the geographical inequities in air pollution, and the severe health effects of particulate pollution on older adults, children, and individuals with cardiovascular or lung disease. It also focuses on the increase in mold exposure among neighborhoods with higher populations of color.</i>	

***Curriculum: Sustainability***

<b>1.15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet?</b>	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum.	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum.	
This topic was covered in <b>elective</b> coursework.	
This topic was <b>not</b> covered.	
Score Assigned:	2
<i>Score explanation:</i> <i>The environmental impact and carbon footprint of animal agriculture is discussed in mandatory class pre-work, but benefits of a plant-based diet are never specifically discussed.</i>	

<b>1.16. Does your <u>medical school</u> curriculum address the carbon footprint of healthcare systems?</b>	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum.	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum.	
This topic was covered in <b>elective</b> coursework.	
This topic was <b>not</b> covered.	
Score Assigned:	2
<i>Score explanation:</i> <i>Annually, the CEO of Boston Medical Center gives a presentation to the entire class that includes initiatives to decrease the hospital's carbon footprint. In the Community and Environmental Health track, BMC's Medical Director of Climate and Sustainability leads a discussion about climate, health equity, and medical waste.</i>	

<b>1.17. Does your <u>medical school</u> curriculum cover these components of sustainable</b>	<b>Score</b>
---	--------------

clinical practice in the <u>core</u> curriculum? (points for each)	
The health <b>and</b> environmental <b>co-benefits</b> of <b>avoiding</b> over-medicalisation, over-investigation and/or over-treatment (2 points)	2
The environmental impact of <b>pharmaceuticals</b> and over-prescribing as a cause of climate health harm. Alternatively teaching on <b>deprescribing</b> where possible and its environmental and health co-benefits would fulfil this metric. (2 points) .	0
The health <b>and</b> environmental <b>co-benefits</b> of <b>non-pharmaceutical management</b> of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK. (1 point)	0
Environmental impact of <b>surgical</b> healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	0
The impact of <b>anaesthetic</b> gases on the healthcare carbon footprint and ways to reduce anaesthesia's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	0
The impact of <b>inhalers</b> on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	0
<b>Waste production</b> within healthcare <b>clinics</b> and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting) (1 point)	0
<p><i>Score explanation:</i>  Health and environmental co-benefits of non-pharmaceutical management is emphasized in the Cardiovascular unit, where diet and exercise is an important intervention in many cardiovascular diseases. In addition, there is emphasis throughout the curriculum of the benefits of green spaces on health.</p>	

### *Curriculum: Clinical Applications*

1.18. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?	
Yes, there are strategies introduced for having conversations with patients about climate change in the <b>core</b> curriculum. (2 points)	
Yes, there are strategies introduced for having conversations with patients about climate change in <b>elective</b> coursework. (1 points)	
No, there are <b>not</b> strategies introduced for having conversations with patients about climate change. (0 points)	
Score Assigned:	2

*Score explanation: In the Pulmonary module, first-year students learn about consulting patients on behavior during high risk air quality days, like staying indoors and planning activities in the morning and evening when ozone levels are lower.*

**1.19. In training for patient encounters, does your medical school's curriculum introduce strategies for taking an environmental history or exposure history?**

Yes, the **core** curriculum includes strategies for taking an environmental history. (2 points)

Only **elective** coursework includes strategies for taking an environmental history. (1 point)

No, the curriculum does **not** include strategies for taking an environmental history. (0 points)

Score Assigned:

2

*Score explanation:*

*In required pre-lecture coursework, there were recommendations on how to take an environmental exposure history. In required small-group sessions, students practiced taking exposure histories for a mock case.*

### ***Curriculum: Administrative Support for Planetary Health***

**1.20. Is your medical school currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?**

Yes, the medical school is currently in the process of making **major** improvements to ESH/planetary health education. (4 points)

Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education. (2 points)

No, there are **no** improvements to planetary health education in progress. (0 points)

Score Assigned:

2

*Score explanation:*

*There was a significant curriculum overhaul over the last 2 years that included the integration of much more planetary health education. Currently, there are small improvements being made but no further major changes.*

**1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum?**

Planetary health/ESH topics are **well integrated** into the core medical school curriculum. (6 points)

Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. (4 points)	
Planetary health/ESH is not integrated and is primarily addressed in <b>(a) standalone lecture(s)</b> . (2 points)	
There is <b>minimal/no</b> education for sustainable healthcare. (0 points)	
Score Assigned:	6
<i>Score explanation:</i> Planetary health/ESH topics are addressed in standalone lectures, during elective coursework, and integrated into many components of the core curriculum. This includes material that relates to health equity, the pulmonary system, psychiatry, fetal development, and other parts of the curriculum.	

<b>1.22. Does your <u>medical school</u> employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?</b>	
Yes, the <b>medical school</b> has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)	
No, the <b>medical school</b> does <b>not</b> have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)	
Score Assigned:	0
No, BUCASM does not seem to have a designated faculty or staff member who is responsible for managing the integration of planetary health and ecologically responsible healthcare into the curriculum. Dr. Molly Cohen-Osher, the Assistant Dean for Curriculum and Instructional Design, is working to improve curricular integration of planetary health but that is not her designated role.	
Section Total (50 out of 72)	
69.4%	

Back to Summary Page [here](#)

# Interdisciplinary Research

**Section Overview:** *This section evaluates the quality and quantity of interdisciplinary planetary health research at the broader institution. Interactions between health and the environment are complex and multifactorial. While climate change has been extensively studied from an environmental science perspective, planetary health is an emerging field. As leading health institutions with talented researchers and research resources, institutions should fund research studying the health effects of climate change and anthropogenic environmental toxins. This obligation is particularly strong because the public and policymakers are more attentive to climate change when its implications for human health are emphasised.*

<b>2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>institution</u>?</b>	
Yes, there are faculty members at the <b>institution</b> who have a <b>primary</b> research focus in planetary health <b>or</b> sustainable healthcare/vetcare. (3 points)	
Yes, there are individual faculty members at the <b>institution</b> who are conducting research <b>related</b> to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)	
There are sustainability researchers at the <b>institution</b> , but not specifically associated with healthcare/vetcare. (1 point)	
No, there are <b>no</b> planetary health and/or sustainability researchers at the <b>institution</b> at this time. (0 points)	
Score Assigned:	3
<p>Score explanation: Anna L. Goldman MD, MPA, MPH is a Primary Care Physician affiliated with Boston University Chobanian &amp; Avedisian School of Medicine. She is the Medical Director of Climate &amp; Sustainability at Boston Medical Center and engages in research on climate and health. (<a href="https://www.bmc.org/about-us/directory/doctor/anna-l-goldman-md">https://www.bmc.org/about-us/directory/doctor/anna-l-goldman-md</a>).</p>	

<b>2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u>?</b>	
There is <b>at least one</b> dedicated department or institute for interdisciplinary planetary health research. (3 points)	
There is <b>not currently</b> a department or institute for interdisciplinary planetary health research, but there are <b>plans</b> to open one in the next 3 years. (2 points)	
There is an <b>Occupational and Environmental Health department</b> , but no interdisciplinary department or institute for planetary health research. (1 points)	
There is <b>no</b> dedicated department or institute. (0 points)	

Score Assigned:	3
<i>Score explanation: Boston University School of Public Health includes the Center for Climate and Health, which is committed to research and advocacy on the intersection between climate change and human health. (<a href="https://sites.bu.edu/climateandhealth/">https://sites.bu.edu/climateandhealth/</a>)</i>	

<b>2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your institution?</b>	
Yes, there is a process in which community members impacted by climate and environmental injustice have <b>decision-making power</b> in the climate + environmental research agenda. (3 points)	
Yes, there is a process in which community members impacted by climate and environmental injustice <b>advise</b> the climate + environmental research agenda. (2 points)	
<b>No</b> , but there are <b>current efforts</b> to establish a process for community members to advise or make decisions on the research agenda. (1 points)	
There is <b>no</b> process, and <b>no</b> efforts to create such a process. (0 points)	
Score Assigned:	0
<i>Score explanation: While Boston University Chobanian &amp; Avedisian School of Medicine has methods in place for community members to provide input on research, there does not exist a specific manner in which community members disproportionately impacted by climate change or environmental injustice can provide direct input or make decisions about the research agenda. However, initiatives do exist through the School of Public Health's Boston-Area Heat Health Working Group to foster conversation on the topic with community and industry members (<a href="https://sites.bu.edu/climateandhealth/boston-heat/">https://sites.bu.edu/climateandhealth/boston-heat/</a>).</i>	

<b>2.4. Does your <u>institution</u> have a planetary health website that centralises ongoing and past research related to health and the environment?</b>	
There is an <b>easy-to-use, adequately comprehensive</b> website that <b>centralises</b> various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities. (3 points)	
There is a website that <b>attempts to centralise</b> various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. (2 points)	
The <b>institution</b> has an <b>Office of Sustainability website</b> that includes <b>some</b> resources related to health and the environment. (1 point)	
There is <b>no</b> website. (0 points)	
Score Assigned:	3

*Score explanation: The Boston University School of Public Health's Center for Climate and Health has a website that centralizes research and information on the topic (<https://sites.bu.edu/climateandhealth/>). Boston University also has a Sustainability-focused website which serves a similar function (<https://www.bu.edu/sustainability/>).*

**2.5. Has your institution recently hosted a conference or symposium on topics related to planetary health?**

Yes, the **institution** has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)

Yes, the **institution** has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)

Yes, the **institution** has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)

The **institution** has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)

No, the **institution** has not hosted a conference on topics related to planetary health in the past three years. (0 points)

Score Assigned:

3

*Score explanation: The Research on Tap series, hosted by the Boston University Office of Research, unites Boston University researchers to explore key topics. Recent topics have focused on Climate Change and Infectious Diseases and more (<https://www.bu.edu/research/category/research-on-tap>). Additionally, the BU School of Public Health held its first Annual CAFÉ Climate & Health Conference in 2024 and will hold a second one in 2025, date to be determined (<https://climatehealthcafe.org>).*

**2.6. Is your institution a member of a national or international planetary health or ESH/ESV organisation?**

Yes, the institution is a member of a national or international planetary health or ESH/ESV organisation. (1 points)

No, the institution is **not** a member of such an organisation. (0 points)

Score Assigned:

0

*Score explanation: The medical school itself is not currently a member of a planetary health or ESH organization, but its affiliated institutions such as Boston Medical Center demonstrate a commitment to and focus on environmental health and sustainability.*

Section Total (12 out of 17)	70.6%
------------------------------	-------

Back to Summary Page [here](#)

# Community Outreach and Advocacy

***Section Overview:*** This section evaluates medical school engagement in community outreach and advocacy efforts associated with planetary health. Researching and teaching planetary health is necessary but not sufficient. It is critical that institutions also directly engage with communities most affected by environmental health harms. Although climate change is a problem largely created by those with power and resources, its impacts fall disproportionately on under-resourced populations and communities of colour. Institutions should partner with local communities affected by climate change and pollution to share information about environmental health threats, advocate together for change, and provide opportunities for students to be a part of this work.

<b>3.1. Does your <u>institution</u> partner with community organisations to promote planetary and health?</b>	
Yes, the <b>institution</b> meaningfully partners with <b>multiple</b> community organisations to promote planetary and environmental health. (3 points)	
Yes, the <b>institution</b> meaningfully partners with <b>one</b> community organisation to promote planetary and environmental health. (2 points)	
The <b>institution</b> does not partner with community organisations, but has participating in community focused events relating to planetary health. (1 point)	
No, there is <b>no</b> such meaningful community partnership. (0 points)	
Score Assigned:	3
<p>Score explanation: Boston Medical Center has created a page dedicated to sustainability: <a href="https://www.bmc.org/sustainability">https://www.bmc.org/sustainability</a> and has detailed specific initiatives such as rooftop farms, decarbonization collaborations, and environmental justice initiatives. Additionally the larger Boston University and BMC institution partners with many community organizations including: C-Heat Research program in Chelsea and Everett, Extreme Heat Resilience Alliance, Mystic River Watershed Alliance and climate impacts, and BMC's partnership with Takeda Pharmaceuticals to address decarbonization. The medical school is not officially involved as a partner.</p> <p><a href="https://www.bumc.bu.edu/about/institutional-master-plan/">https://www.bumc.bu.edu/about/institutional-master-plan/</a></p>	

<b>3.2. Does your <u>institution</u> offer community-facing courses or events regarding planetary health?</b>
The <b>institution</b> offers community-facing courses or events at least once every year. (3 points)
The <b>institution</b> offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)

The <b>institution</b> has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)	
The <b>institution/medical school</b> have not offered such community-facing courses or events. (0 points)	
Score Assigned:	2
<p><i>Score explanation: The BU School of Public Health offers a summer enrichment program for high-school-aged students that aims to introduce them to many topics in public health, including environmental health (linked below). The medical campus holds an annual Sustainability Festival on Talbot Green on the medical campus that is open to the community but is mainly focused on students, faculty, and staff.</i></p> <p><i>(<a href="https://www.bu.edu/sph/news/articles/2023/pophealthexperience-a-public-health-primer-for-high-school-students/">https://www.bu.edu/sph/news/articles/2023/pophealthexperience-a-public-health-primer-for-high-school-students/</a>)</i></p>	

<b>3.3. Does your <u>institution</u> have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?</b>	
Yes, all students <b>regularly</b> receive communication updates dedicated to planetary health and/or sustainable healthcare. (2 points)	
Yes, planetary health and/or sustainable healthcare topics are regularly included in communication updates to <b>some courses</b> . (1 point)	
Students <b>do not</b> receive communications about planetary health or sustainable healthcare. (0 points)	
Score Assigned:	2
<p><i>Score explanation: Students signed up to receive regular communications from <a href="mailto:mollers@bu.edu">mollers@bu.edu</a> receive institution-wide updates on upcoming events and opportunities that include the medical campus. Students are also welcome to sign up for communications from the BUSPH Center for Climate and Health.</i></p>	

<b>3.4. Does the <u>institution</u> or <u>main affiliated hospital trust</u> engage in professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?</b>	
Yes, the <b>institution</b> or <b>main affiliated hospital trust</b> offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health. (2 points)	
Yes, the <b>institution</b> or <b>main affiliated hospital trust</b> offers one course relating to planetary health and/or sustainable healthcare for post-graduate provider. (1 point)	
There are <b>no</b> such accessible courses for post-graduate providers. (0 points)	

Score Assigned:	0
Score explanation: There are no courses for post-graduate providers focusing on planetary health or sustainable healthcare.	

<b>3.5. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about environmental health exposures?</b>	
Yes, the <b>medical school</b> or <b>all affiliated hospitals</b> have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated medical centres have accessible educational materials for patients. (0 points)	
Score Assigned:	0
Score explanation: BU Environmental Health and Safety has web pages that discuss indoor air quality, asbestos, and other environmental health hazards but these are targeted at BU Employees and mainly discuss on-campus issues. ( <a href="https://www.bu.edu/ehs/residential-safety-home/residential-safety-programs-services/industrial-hygiene/indoor-air-quality-assessments/">https://www.bu.edu/ehs/residential-safety-home/residential-safety-programs-services/industrial-hygiene/indoor-air-quality-assessments/</a> )	

<b>3.6. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?</b>	
Yes, the <b>medical school</b> or <b>all affiliated hospitals</b> have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	1
Score explanation: The Boston Medical Center website has a page describing sustainability efforts and how they connect to health and health equity. ( <a href="https://www.bmc.org/sustainability">https://www.bmc.org/sustainability</a> , <a href="https://www.bmc.org/about-us/stories/environmentally-friendly-campus">https://www.bmc.org/about-us/stories/environmentally-friendly-campus</a> )	

<b>Section Total (8 out of 14)</b>	<b>57.1%</b>
------------------------------------	--------------

Back to Summary Page [here](#)

*Are there additional community engagement and advocacy resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.*

# Support for Student-Led Planetary Health Initiatives

***Section Overview:*** This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups. Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.

<b>4.1. Does your <u>institution</u> offer support for students interested in enacting a sustainability initiative/QI project?</b>	
Yes, the <b>institution</b> <i>either</i> offers grants for students to enact sustainability initiatives/QI projects <i>or</i> sustainability QI projects are part of the core curriculum. (2 points)	
The <b>institution</b> encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, <b>but</b> there is no student funding available and there is no requirement to participate. (1 point)	
No, <b>neither</b> the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects. (0 points)	
Score Assigned:	2
Score explanation: There are multiple opportunities for students to access grants through BU's Campus Climate Lab. Student groups on the medical campus are eligible for funding, which the Climate Action Group uses for initiatives on improving campus sustainability. Finally, students have the opportunity to complete sustainability QI projects through the core curriculum by selecting the Community and Environmental Health track.	

<b>4.2. Does your <u>institution</u> offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?</b>	
The <b>institution</b> has a <b>specific</b> research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)	
There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these <b>require student initiative</b> to seek these out and carry them out in their spare time. (1 point)	
There are <b>no opportunities</b> for students to engage in planetary health/sustainable healthcare research. (0 points)	
Score Assigned:	2
Score explanation: Medical students are eligible to apply to the Graduate Student Summer Fellows program at the Institute for Global Sustainability (IGS). This is a funded 10-week program for students to conduct independent research in planetary health, sustainability transitions, or energy	

systems. Medical students can also apply for funding for a summer research project with any BU faculty through the MSSRP program.

**4.3. Does the institution have a webpage where students can find specific information related to planetary health and/or sustainable healthcare/vetcare activities and mentors within the institution? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.**

The institution has a webpage with specific information related to planetary health or sustainable healthcare/vetcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. (2 points)

There is an institution webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information. (1 point)

There is **no institution** specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. (0 points)

Score Assigned:

2

*Score explanation: The Boston University School of Public Health has a website dedicated to environmental health, which includes a list of current initiatives underway at the school and faculty in the Center for Climate and Health. (<https://sites.bu.edu/climateandhealth/>)*

**4.4. Does your institution have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?**

Yes, there is a student organisation **with faculty support** at my medical school dedicated to planetary health or sustainability in healthcare. (2 points)

Yes, there is a student organisation at my medical school dedicated to planetary health or sustainability in healthcare but it **lacks faculty support**. (1 point)

No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)

Score Assigned:

2

*Score explanation: The Climate Action Group at the Boston University Medical Campus has a dedicated faculty advisor.*

**4.5. Is there a student liaison representing sustainability interests who serves on a department or institutional decision-making council to advocate for curriculum reform and/or**

sustainability best practices?	
Yes, there is a student representative that serves on a department or institutional decision-making council/committee. (1 points)	
No, there is no such student representative. (0 points)	
Score Assigned:	1
<i>Score explanation: The BU Office of Sustainability hires a <a href="#">Sustainability Intern</a> for the medical campus. This student serves as a liaison between the medical campus and the sustainability office, serves on the Green Labs Committee, and promotes sustainability efforts on the medical campus.</i>	

4.6. In the past year, has the <u>institution</u> had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	Score
Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.	1
Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	1
Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.	1
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	0
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	0
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1
<i>Score explanation:</i>  <i>The BMC Rooftop Farm provides fresh local produce for the BMC Demonstration Kitchen, Preventive Food Pantry, and hospitalized patients. Medical students have the opportunity to volunteer at the farm.</i>  <i>The BU-Harvard Research Coordinating Center hosted its inaugural Climate and Health Conference. BU also hosted a Climate, Biogeoscience, and Health: Transformative Science to Real-World Action event. BUSM's Spectrum of Physician Advocacy hosted an event on the BMC's new Clean Power Prescription Program.</i>  <i>There were no cultural arts events, installations or performances related to planetary health hosted by BU in the past year. Aside from the rooftop farm, there are no established volunteer opportunities regarding environmental health.</i>	

The Outdoors Club organizes multiple outdoor events throughout the year.

Section Total (13 out of 15)

86%

Back to Summary Page [here](#)

## Campus Sustainability

***Section Overview:*** This section evaluates the support and engagement in sustainability initiatives by the institution. The healthcare industry is a major contributor to greenhouse gas emissions as well as pollution that harms local, regional, and global ecosystems. While healthcare is, by nature, a resource-intensive endeavour, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinising every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our medical schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimising environmental impact.

### 5.1. Does your institution have an Office of Sustainability?

Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is **at least one designated staff member** for sustainability at the hospital. (3 points)

There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but **no specific staff member** in charge of hospital sustainability. (2 points)

There are **no salaried sustainability staff**, but there is a sustainability task force or committee. (1 point)

There are **no staff members or task force** responsible for overseeing campus sustainability. (0 points)

Score Assigned:

3

*Score explanation: BU has a robust Office of Sustainability including an office at the Medical Campus with two full-time staff members who dedicate a portion of their time to work on the medical campus and a medical student intern. At Boston Medical Center, there is a designated staff member in charge of sustainability with the role of Executive Director of Support Services and Sustainability.*

### 5.2. How ambitious is your institution's plan to reduce its own carbon footprint?

The institution has a **written and approved plan** to achieve carbon neutrality by **2030** (5 points)

The institution has a **written and approved plan** to achieve carbon neutrality by **2040** (3 points)

The institution has a stated goal of carbon neutrality by <b>2040</b> but has <b>not created a plan</b> to reach that goal or the <b>plan is inadequate</b> (1 point)	
The institution/medical school does <b>not</b> meet any of the requirements listed above (0 points)	
Score Assigned:	3
<p><i>Score explanation: The Boston University Climate Action Plan has a stated goal of carbon neutrality by 2040. Further, the plan sets forth a path for increasing BU's diversion rate to 70% by 2026. The strategies for achieving this include energy efficiency, shifting from fossil fuels to electricity for heating and cooling, sourcing 100% renewable energy, and transitioning BU's fleet to electric vehicles. Currently, the Climate Action Plan is 65% of the way towards its goal. Additionally, BU's Zero Waste Plan was developed by a 54-member task force during the fall of 2019, and released on March 3, 2021. The Plan outlines 21 different initiatives that focus on various important aspects of Zero Waste. As of January 2024, BU is over halfway towards the Zero Waste goal. To see progress, you can view the <a href="#">data dashboard</a>.</i></p>	

<b>5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?</b>	
Yes institution buildings are <b>100%</b> powered by renewable energy. (3 points)	
Institution buildings source <b>&gt;80%</b> of energy needs from off-site and/or on-site renewable energy. (2 points)	
Institution buildings source <b>&gt;20%</b> of energy needs from off-site and/or on-site renewable energy. (1 point)	
Institution buildings source <b>&lt;20%</b> of energy needs from off-site and/or on-site renewable energy. (0 points)	
Score Assigned:	3
<p><i>Score explanation: At this time, 100% of the BU energy needs are met with renewable RECs via a South Dakota wind farm. BU purchases electricity from 48.6 MW of wind generation capacity annually through a 20-year Power Purchase Agreement (PPA) with ENGIE North America. Annually, the associated 205,000 Green-e Certified RECs are enough to meet the energy requirements of both the main BU campus and the medical campus.</i></p>	

<b>5.4. Are sustainable building practices utilised for new and old buildings on the <u>institution's</u> campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?</b>
Yes, sustainable building practices are utilised for new buildings on the institution's campus and the <b>majority</b> of old buildings <b>have been retrofitted</b> to be more sustainable. (3 points)

Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have <b>not been retrofitted</b> . (2 points)	
Sustainable building practices are <b>inadequately or incompletely</b> implemented for new buildings. (1 point)	
Sustainability is <b>not considered</b> in the construction of new buildings. (0 points)	
Score Assigned:	2
<i>Score explanation: While BU has committed to pursuing LEED Gold certifications for all new construction as part of their Climate Action Plan, most older buildings on the medical campus have not been significantly retrofitted. Some newer buildings achieving LEED Gold certification on the medical campus include the Medical Student Residence and the Goldman School of Dental Medicine. Another bioresearch building has been LEED Certified but did not achieve Gold or Silver specifications. These three buildings represent a small proportion of the medical campus. Despite this, some buildings are in the process of being retrofitted such as the Center for Advanced Biomedical Research which is being completed later this year.</i>	

<b>5.5. Has the <u>institution</u> implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?</b>	
Yes, the institution has implemented strategies to encourage and provide <b>environmentally-friendly transportation options</b> such as safe active transport, public transport, or carpooling and these options are well-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default. (2 points)	
The institution has implemented <b>some</b> strategies to provide environmentally-friendly transportation options, but the options are <b>unsatisfactorily</b> accessible or advertised. (1 point)	
The institution has <b>not</b> implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)	
Score Assigned:	2
<i>Score explanation: The BU Medical Campus offers a secure bike cage, a discounted city bike membership, a discounted public transit pass, and a shuttle that goes from the medical campus to the main campus. However, it is difficult to access off-campus clinical sites without a car.</i>	

<b>5.6. Does your <u>institution</u> have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?</b>	
Yes, the institution has <b>both</b> compost <b>and</b> recycling programs accessible to students and faculty. (2 points)	
The institution has <b>either</b> recycling <b>or</b> compost programs accessible to students and faculty, but not both. (1 point)	

There is <b>no</b> compost or recycling program at the medical school. (0 points)	
Score Assigned:	2
<i>Score explanation: The medical school has recycling bins all around campus as well as a compost receptacle in the cafeteria and in the Medical Student Residence. Additionally, there is a lab plastic recycling program on the medical campus.</i>	

5.7. Does the <u>institution</u> apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?	
Yes, the institution has <b>adequate</b> sustainability requirements for food and beverages, including meat-free days or no red-meat, and <b>is engaged</b> in efforts to increase food and beverage sustainability. (3 points)	
There are sustainability guidelines for food and beverages, but they are <b>insufficient or optional</b> . The institution <b>is engaged</b> in efforts to increase food and beverage sustainability. (2 points)	
There are sustainability guidelines for food and beverages, but they are <b>insufficient or optional</b> . The institution is <b>not</b> engaged in efforts to increase food and beverage sustainability. (1 point)	
There are <b>no</b> sustainability guidelines for food and beverages. (0 points)	
Score Assigned:	2
<i>Score explanation: The medical school cafeteria currently does not have sustainability requirements but the BU Office of Sustainability has been working with Chequers cafeteria to improve their waste management. In regards to beverages, the medical campus, like all BU campuses, is currently a Pepsi campus. There has been ongoing collaboration with Pepsi for years to try to develop sustainable solutions for beverages on campus. This includes reduction of sugary drinks, decreased waste from deliveries, and shifting away from plastic where possible. These changes are still ongoing.</i>	

5.8. Does the <u>institution</u> apply sustainability criteria when making decisions about supply procurement?	
Yes, the institution has <b>adequate</b> sustainability requirements for supply procurement <b>and is engaged</b> in efforts to increase sustainability of procurement. (3 points)	
There are sustainability guidelines for supply procurement, but they are <b>insufficient or optional</b> . The institution is <b>engaged</b> in efforts to increase sustainability of procurement. (2 points)	
There are sustainability guidelines for supply procurement, but they are <b>insufficient or optional</b> . The institution is <b>not engaged</b> in efforts to increase sustainability of procurement. (1 point)	
There are <b>no</b> sustainability guidelines for supply procurement. (0 points)	
Score Assigned:	3

*Score explanation: In 2021, BU has launched their sustainable purchasing program. When a competitive RFP is issued, a minimum of 15% of the available points of the selection criteria on the supplier scorecard shall be allotted to sustainability. Factors that may be considered include, but are not limited to, environmental preference, human health implications, or social equity business practices. It includes Required Minimums, which are the basic sustainability certifications and practices required for the University to consider purchasing a product. Preferred Standards are additional considerations that represent a higher level of sustainability but may be more difficult to achieve. While this initiative is common to the entire institution, medical campus procurement falls under these same guidelines.*

**5.9. Are there sustainability requirements or guidelines for events hosted at the institution?**

Every event hosted at the institution **must** abide by sustainability criteria. (2 points)

The institution **strongly recommends or incentivizes** sustainability measures, but they are **not required**. (1 point)

There are **no** sustainability guidelines for institution events. (0 points)

Score Assigned:

1

*Score explanation: The Student Committee on Medical School Affairs has a list of recommendations to make an event more sustainable, but they are not required.*

<https://www.bumc.bu.edu/scomsa/planning-events/being-sustainable/>

**5.10. Does your institution have programs and initiatives to assist with making lab spaces more environmentally sustainable?**

Yes, the institution has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable. (2 points)

There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)

There are **no** efforts at the institution to make lab spaces more sustainable. (0 points)

Score Assigned:

2

*Score explanation: The BU Environmental Health and Safety site has a pollution prevention page with recommendations for general lab sustainability and support for solvent recycling and chemical reuse. The medical campus has styrofoam recycling for laboratories and the BU Zero Waste Plan has a section on Lab Waste and Chemicals. Additionally, there is a lab plastic recycling program that adds to the environmental sustainability of lab spaces on campus.*

**5.11. Does your institution's endowment portfolio investments include fossil-fuel companies?**

The institution is <b>entirely divested</b> from fossil fuels <b>and</b> has made a <b>commitment to reinvest divested funds</b> into renewable energy companies or renewable energy campus initiatives. (4 points)	
The institution is <b>entirely divested</b> from fossil fuels. (3 points)	
The institution has <b>partially divested</b> from fossil fuel companies <b>or</b> has made a <b>commitment to fully divest</b> , but <b>currently</b> still has fossil fuel investments. (2 points)	
The institution has <b>not divested</b> from fossil-fuel companies, but faculty and/or students are <b>conducting organised advocacy</b> for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been <b>no efforts</b> to change that. (0 points)	
Score Assigned:	2
<i>Score explanation: In 2021, the president of the university announced plans to divest from fossil fuels, including no new investments in fossil-fuel-focused products or companies that extract fossil fuels. The policy also states that there would be immediate divestment from fossil fuel extractors but that other fossil fuel investments may take as much as a decade to be completely removed from the endowment.</i>	

Section Total (25 out of 32)	78%
------------------------------	-----

Back to Summary Page [here](#)

# Grading

## Section Overview

This section focuses on the grading of the report card. The institution received a grade for each of the individual sections as well as an overall institutional grade. Section point totals were tallied, divided by the total points available for the section, and converted to a percentage. The overall institutional grade is a weighted average of the section grades, with curriculum receiving a higher weight owing to its larger number of metrics. Letter grades for each section and the institution overall were then assigned according to the table below.

Letter Grade*	Percentage
A	80% - 100%
B	60% - 79%
C	40% - 59%
D	20% - 39%
F	0% - 19%

*\*Within each grade bracket, a score in the top 5% (\_5 to \_9%), receives a “+”, and a score in the bottom 5% (\_0- \_4%) receives a “--”. For example, a percentage score of 78% would be a B+.*

[Please input your scores [HERE](#)]

## Planetary Health Grades for the Boston University Chobanian and Avedisian School of Medicine

The following table presents the individual section grades and overall institutional grade for the Boston University Chobanian and Avedisian School of Medicine on this medical-school-specific Planetary Health Report Card.

Section	Raw Score %	Letter Grade
<b>Planetary Health Curriculum (30%)</b>	$(50/72) \times 100 = 69\%$	B
<b>Interdisciplinary Research (17.5%)</b>	$(12/17) \times 100 = 71\%$	B
<b>Community Outreach and Advocacy (17.5%)</b>	$(8/14) \times 100 = 57\%$	C
<b>Support for Student-led Planetary Health Initiatives (17.5%)</b>	$(13/15) \times 100 = 87\%$	A
<b>Campus Sustainability (17.5%)</b>	$(25/32) \times 100 = 78\%$	B
<b>Institutional Grade</b>	$(69 \times 0.3 + 71 \times 0.175 + 57 \times 0.175 + 87 \times 0.175 + 78 \times 0.175) = 72\%$	<b>B</b>



# Report Card Trends

## Section Overview

This graph demonstrates trends in overall and section grades for the years in which *Boston University Chobanian and Avedisian School of Medicine* has participated in the Planetary Health Report Card initiative.

**Planetary Health Report Card Trends for Boston University Chobanian and Avedisian School of Medicine**

