



---

**Planetary Health Report Card**  
**(Medicine):**  
*University of Pittsburgh School of*  
*Medicine*

---



University of  
**Pittsburgh**

School of  
Medicine

2024-2025 Contributing Team:

- Students: *Longyi (Ivy) Yip (MS2)*, *Rami Homs (MS1)*, *Karensa Tjoa (MS2)*, *Brianna Brooks, MPH (MS3)*, *Lee-Kai Sun (MS3)*, *Tyler Williams (MS1)*
- Faculty Mentors: *Noe Woods, MD*; *Stephanie Maximous, MD, MS*; *Corey Flynn, MPPM*

\*Primary Contact: Longyi (Ivy) Yip ([loy16@pitt.edu](mailto:loy16@pitt.edu)) ; Rami Homs ( [rah231@pitt.edu](mailto:rah231@pitt.edu) )

Land acknowledgment: The University of Pittsburgh System (Oakland, Greensburg, Bradford, Johnstown, Titusville) occupies the ancestral lands of the Seneca (Sen-uh-kuh) in Pittsburgh and Sharpsburg, Adena culture, Hopewell culture, and Monongahela (Muh-naang-guh-hee-luh) peoples who were later joined by refugees of other tribes (including the Delaware, Shawnee, Mingo, and Haudenosaunee tribes (Hoe-den-no-show-nee), who were all forced off their original land and displaced by European colonists. We acknowledge the most recent displacement of the Seneca near Warren County (between Bradford and Titusville campuses) in 1965 and native languages and cultures that have been severely damaged or lost due to forced removal and assimilation. We honor the original caretakers of this region and uplift their historic, unique, and enduring relationship with this land, which is their ancestral territory.

We pay our respects to their Elders and their past, present, and future people, community, and culture. While we cannot change the past, we commit to continued gratitude for the gifts of nature, along with ongoing respect, care, and stewardship of the land, each other, and future generations. We are committed to learning and supporting indigenous communities in the region today and in the future.

This land acknowledgment reminds us of the people who have been harmed and oppressed in the past, and of the harms that continue today. It reminds us that we must attend to the intersectional identities and power systems of race, gender, class, religion, and ability, to build peace, and to build a more just and equitable future.

## Summary of Findings

<b>Overall Grade</b>	<b>B+</b>
<b>Curriculum (2025)</b>	<b>B-</b>
<ul style="list-style-type: none"> <li>The University of Pittsburgh School of Medicine (UPSOM) includes in-depth planetary health topics at several key points during the core curriculum. Planetary health in our core curriculum is discussed in singular lectures during the cardiology and pulmonology preclinical blocks, and during the ObGyn and Anesthesia clerkships</li> <li><b>Recommendations:</b> We recommend that relevant planetary health effects be addressed in all Foundations, Organ System cores. Content should be routinely taught throughout the pre-clinical education rather than only in stand-alone lectures or electives. The medical school should also provide students with patient education materials on climate change to be able to initiate effective conversations with patients..</li> </ul>	
<b>Interdisciplinary Research</b>	<b>A</b>
<ul style="list-style-type: none"> <li>There are many opportunities for interdisciplinary planetary health research at the University of Pittsburgh, with planetary health conferences and resources to get involved in research across campus by the Mascaro Center for Sustainable Innovation and the Office of Sustainability in the Health Sciences.</li> <li><b>Recommendations:</b> The University of Pittsburgh could improve their programs to give decision-making power to community members impacted by climate and environmental justice.</li> </ul>	
<b>Community Outreach and Advocacy (2025)</b>	<b>C-</b>
<ul style="list-style-type: none"> <li>Most of the programming planned in collaboration with partners focuses on the education of students and faculty from the University of Pittsburgh and the School of Medicine rather than engaging members of the community</li> <li><b>Recommendations:</b> We recommend the Office of Sustainability for the Health Sciences (OSHS) work with students to plan more events for the benefit of community members. More material needs to be distributed to UPMC patients regarding the health effects of environmental health exposures and climate change.</li> </ul>	
<b>Support for Student-Led Initiatives</b>	<b>A+</b>
<ul style="list-style-type: none"> <li>The University of Pittsburgh provides strong support for students interested in planetary health. The Office of Sustainability in the Health Sciences gives students from all health science schools to get involved in planetary health initiatives. The Mascaro Center for Sustainable Innovation provides research and grant opportunities for students interested as well.</li> <li><b>Recommendations:</b> We recommend that initiatives from Pitt Sustainability that apply to Health Science students are put in one place to make them easily accessible to students.</li> </ul>	
<b>Campus Sustainability</b>	<b>B</b>
<ul style="list-style-type: none"> <li>Active recycling and composting efforts occur across campus. Efforts are underway to maintain or improve sustainability requirements for food and beverage selections, as well as supply procurement. On-going initiatives provide opportunities for green lab and office space designations.</li> <li><b>Recommendations:</b> Efforts regarding sustainability should be discussed at the administrative level to ensure that sustainability becomes the standard of practice at the University of Pittsburgh. Educational campaigns, access to participation in efforts, and research into renewable energy sources should occur.</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
<p><i>Score explanation:</i> In 2024, the elective “The Environmental Impact of Health Care: How to Heal the Planet and Ourselves” is offered three times throughout the 18-month preclinical education for first-year medical students and once for second-year medical students. (We are unsure if this is 2 or 3 points) This week includes topics such as healthcare sustainability, climate medicine, air pollution and inhaler use, the health benefits of trees, the carbon footprint of healthcare, how to incorporate sustainable plant based foods and exercise to promote personal health and the planet, the psychology of climate change and it includes tours of local waste streams (landfill, recycling plant etc.).</p>	

## *Curriculum: Health Effects of Climate Change*

**1.2. Does your medical school curriculum address the relationship between extreme heat, health risks, and climate change?**

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

*Score explanation:* There are three sessions within our core curriculum that cover this topic.

1) Patient, Physician, and Society thread during Cardiology core course. With longitudinal preceptors, all students discuss a case dedicated to the adverse effects of extreme heat on human health. The case walks through the potential effects of extreme heat on patients (older adults) with heart failure, how to prevent this, and ways medications like diuretics need to be adjusted during heat waves. The case also highlights how some populations are more vulnerable than others due to geographic location, socioeconomic status and other social determinants of health.

One of the objectives was: "Recognize the impact of global warming on vulnerable patient populations with cardiovascular disease and the role of social determinants of health in management of chronic disease".

2) ObGyn clerkship lecture "How Climate Change Impacts Women's Health"

Case: pregnant postal service worker during a heat wave in historically red lined neighbourhood. Physiology of heat, global changes in heat caused by climate change and effects on human health discussed at length.

This small group session is required for all medical students and has the following objectives:

1. Understand the broad categories of human health effects from climate change and how it acts as a threat potentiator.
2. Gain a sense of the scope of the problem now and in the future.
3. Understand how climate change preferentially effects vulnerable populations.
4. Understand the unique impacts on pregnancy (pre-eclampsia, low birth weight, heat).
5. Understand the global impacts of extreme weather events, air pollution, sexual assault/ violence, food and water insecurity, mental health effects, and education disruption on women.
6. Understand the most important health threats to women in the US from climate change.

**1.3. Does your medical school curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?**

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

3

*Score explanation:* Extreme Weather Events on Individual Health :

1) ObGyn clerkship lecture “Climate Change Impacts on Women’s Health”:

Wildfires, heat waves, hurricanes, floods, droughts discussed in-depth.

2) Pre-Clinical Week Large Group Session “Introduction to Sustainable Healthcare: First Do No Harm”. Required session discusses global distribution of health effects from heat, changing dengue distribution, and extreme weather on food security.

3) Patient, Physician, and Society thread during Cardiology with a case dedicated to the adverse effects of extreme heat on human health. The case walks through the potential effects of extreme heat on patients (older adults) with heart failure, how to prevent this, and ways that medications like diuretics need to be adjusted during heat waves. The case also highlights how some populations are more vulnerable than others due to geographic location, socioeconomic status and other social determinants of health.

Extreme Weather Events on Health Systems:

ObGyn clerkship lecture: Healthcare system: Examples of health care systems effected by hurricanes (hospitals in NY, hurricane Sandy) wildfires (Washington state) and how extreme weather effected delivery of care at these hospitals

**1.4. Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases?**

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

2

*Score explanation:* The changing Global distribution of dengue virus is discussed in the required large group session “Introduction to Sustainable Healthcare: First Do No Harm” in the pre-clinical week.

**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:* The respiratory effects of climate change and air pollution are mentioned 3 times in our core curriculum.

1) [Patient, Physician, and Society 1 and 2](#) in Spring 2024 introduced Climate Change and Environmental Health Sustainability via small group problem-based learning. Topics included heat stress, heart failure, and air pollution.

2) The Pulmonology block in March 2024 discussed the effect of air pollution on obstructive lung disease.

Examples include:

“Chronic bronchitis is more common among urban dwellers exposed to air pollutants, and is associated with an increased risk of infection.” - Pathology -Obstructive Lung Disease.

“Exposure to radon, asbestos, air pollution, and wood smoke has also been shown to increase the risk of lung cancer.” – Lung Cancer, Pulmonology

“[Idiopathic pulmonary fibrosis] has also been associated with several genetic mutations and environmental/occupational pollutant exposures.” – Interstitial Lung Disease, Pulmonology

“Other common triggers for asthma exacerbations are exercise, weather changes, and exposure to tobacco smoke, air pollution, cold or hot air, strong perfumes, or other irritants.” – Pediatric Pulmonary Disease, Pulmonology

In ObGyn clerkship lecture “Climate Change Impacts on Women’s Health”, we discuss the annual mortality rate from air pollution and the underlying mechanism of injury of air pollution on human health. We also discuss the causes of air pollution including the main contributor, the burning of fossil fuels.

**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 an MS2 course [Patient, Physician, and Society 1 and 2](#) introduced “Climate Change and Environmental Health Sustainability” which discussed a case of heat-related illness that emphasized risk factors within the patient’s social history and environment. It pointed out that a patient lived in a neighbourhood classified as a “heat island”. One of the objectives was to “Recognize the impact of global warming on vulnerable patient populations with cardiovascular disease and the role of social determinants of health in management of chronic disease.” As part of the cardiology block in the Three Rivers Curriculum for MS1s, students discussed a similar case that focused on chronic heart failure. They discussed social determinants of health like the MS2s, as well as how to “counsel patients to protect them from forecasted heat waves.”

**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:* See objective number 6

Introduction to Sustainable Healthcare: First Do No Harm

Goal: Students attending this didactic should develop an understanding of the impact of the current healthcare system on the environment, the generation and flow of medical waste, and the science that will make positive change in the future.

**Lecture Objectives**

Students attending this didactic will:

1. Understand the environmental impact of healthcare in the United States.

2. Understand the waste streams generated in healthcare including municipal waste, regulated medical waste, anesthetic gases, sharps, and pathologic and chemotherapy waste.
3. Learn the impact of unused items (overage), waste segregation, and recycling.
4. Understand the carbon footprint of healthcare including scope 1, 2, and 3 emissions.
5. Understand important actions healthcare providers need to take to reduce carbon emissions.
6. Understand the psychology of climate change, the concept of moral injury and eco anxiety, and will learn psychological methods for maintaining their own emotional and physical health as related to climate change.

**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:

2

*Score explanation:* The connection between health, food and water security, ecosystem health and climate change is discussed in of our core curriculum:

1) In ObGyn clerkship lecture “Climate Change Impacts on Women’s Health”

This topic is also covered in the elective mentioned above, “[The Environmental Impact of Health Care: How to Heal the Planet and Ourselves](#)”.

The elective MS3 course “Medical Nutrition” does not feature food security in the learning objectives, but it includes optional readings such as “Promoting Food Security for All Children” and a podcast called “Food Insecurity.”

**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 <b>elective</b> coursework.	
This topic was <b>not</b> covered.	
Score Assigned:	3
<p><i>Score explanation:</i> This thread is discussed at three points in the curriculum:</p> <p>1) <a href="#">Patient, Physician, and Society 1 and 2</a> in Spring 2024 introduced “Climate Change and Environmental Health Sustainability” in small group learning. Topics included heat stress and heart failure in older adults and minority populations.</p> <p>2) In ObGyn clerkship lecture “Climate Change Impacts on Women’s Health”</p> <p>Pre-Clinical Week Large Group Session “Introduction to Sustainable Healthcare: First Do No Harm”.</p>	

<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:	2
<p><i>Score explanation:</i> Data on global distribution of heat morbidity, dengue, food and water insecurity presented during large group session</p> <p>1) Pre-Clinical Week Large Group Session “Introduction to Sustainable Healthcare: First Do No Harm”. Required session discusses global distribution of health effects from heat, changing dengue distribution, and extreme weather on food security.</p>	

***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:	0
<p><i>Score explanation:</i> The syllabus for the Reproductive course in the new Three Rivers Curriculum briefly mentions that environmental exposures such as endocrine disruptors have been a reason for delayed puberty. It also states that congenital malformations can be caused by environmental teratogens. There is no information on the specifics of industry-related environmental toxins and their impact on reproductive health. These topics are also not mentioned during the OBGYN clerkship.</p>	

<p><b>1.12. Does your <u>medical school</u> curriculum address important human-caused environmental threats that are relevant to the university’s surrounding community?</b></p>	
<p>This topic was explored <b>in depth</b> by the <b>core</b> curriculum.</p>	
<p>This topic was <b>briefly</b> covered in the <b>core</b> curriculum.</p>	
<p>This topic was covered in <b>elective</b> coursework.</p>	
<p>This topic was <b>not</b> covered.</p>	
Score Assigned:	1
<p><i>Score explanation:</i> The elective “Environmental Health” covered the topic of local factory waste and pollution. Specifically, one lecture covered a fire at the Clairton Coke Works factory in PA that caused a spike in childhood ER visits and was a huge air pollution problem in the surrounding community. This topic was also covered in an optional lunch panel that discussed careers in environmental health.</p>	

<p><b>1.13. To what extent does your <u>medical school</u> emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?</b></p>	
<p>This topic was explored <b>in depth</b> by the <b>core</b> curriculum.</p>	
<p>This topic was <b>briefly</b> covered in the <b>core</b> curriculum.</p>	
<p>This topic was covered in <b>elective</b> coursework.</p>	
<p>This topic was <b>not</b> covered.</p>	
Score Assigned:	0
<p><i>Score explanation:</i> No mention of indigenous knowledge and value systems in association with climate or planetary health solutions was found in the core curriculum or elective coursework.</p>	

**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

*Score explanation:* Population Health (MS2 course): Slides mention that residential racial segregation leads to “unhealthy physical exposures”, which harm childhood and adult health. Slides assert that one effect of neoliberalism/capitalism is environmental pollution, due to industry deregulation. They show a map of areas with highest concentration of black carbon in air in Pittsburgh, as well as a map of Pittsburgh overlaid with area deprivation index scores (a metric linked to several healthcare outcomes, including higher rates of diabetes and cardiovascular disease, increased utilization of health services, and earlier death).

### *Curriculum: Sustainability*

**1.15. Does your medical school curriculum address the environmental and health co-benefits of a plant-based diet?**

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:

1

*Score explanation:* A week-long elective covers healthcare sustainability via optional readings and asynchronous lectures. Included are a field trip to a local site of interest (recycling plant, Cancer Bridges, or medical autoclave site), trees and outdoors to promote healing, exercise as treatment for common conditions and for health, and plant based eating to preserve the planet and our own health.

**1.16. Does your medical school curriculum address the carbon footprint of healthcare systems?**

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

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

This topic was covered in <b>elective</b> coursework.	
This topic was <b>not</b> covered.	
Score Assigned:	2
<p><i>Score explanation:</i> Pre-clinical clerkship week large group session includes several slides on the carbon footprint of the entire health care system, the US relative to other countries, and the footprint of specific procedures including cataract surgery, hysterectomy and birth of a baby.</p> <p>The elective explores this in detail in the “<a href="#">The Environmental Impact of Health Care: How to Heal the Planet and Ourselves</a>”. This topic was also addressed in an optional lunch time panel discussion on “Careers in Environmental Health”</p>	

1.17. Does your <u>medical school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each)	Score
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)	1
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)	1
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)	1
<p><i>Score explanation:</i></p> <p><b>Over-medicalization:</b> Lecture “Introduction to Sustainable Healthcare: First Do No Harm” in the pre-clinical wee includes slides on need for investment in primary prevention as an environmental intervention.</p> <p><b>Surgical:</b> Lecture “Introduction to Sustainable Healthcare: First Do No Harm” includes multiple slides on the environmental impact of surgery and how to improve it.</p>	

**Anesthesia:** The Environmental impact of anesthesia is covered in the required text and group sessions for the Anesthesia clerkship.

**Waste:** “Introduction to Sustainable Healthcare: First Do No Harm” includes multiple slides on the waste streams produced in health care, their environmental impact and how to reduce waste.

There is also an optional lunch talk panel (not core curriculum) discussing the impact of anesthesia gas on healthcare carbon footprint, clinicians’ experience in reducing surgical waste in OB-GYN locally in one healthcare system, and in reducing trash bag usage in multiple hospital office units or food waste in hospital cafeteria.

### *Curriculum: Clinical Applications*

**1.18. In training for patient encounters, does your medical school’s 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 **core** curriculum. (2 points)

Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework. (1 points)

No, there are **not** strategies introduced for having conversations with patients about climate change. (0 points)

Score Assigned: 0

*Score explanation:* This is not incorporated into any standardized patient simulation prior to starting clerkships.

**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: 0

*Score explanation:* Students are taught to include social history and food insecurity in the Medical Interviewing courses. However, environmental pollution is not introduced as an important component of social history-taking.

### *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:

4

*Score explanation:* Our Dean created “The Office of Sustainability in the Health Sciences” in 2023 to address planetary health in the curriculum. The faculty in this office are working to incorporate planetary health learning throughout the preclinical years and clinical years.

A week-long elective is now offered: “The Environmental Impact of Health Care: How to Heal the Planet and Ourselves.”

**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 **(a) standalone lecture(s)**. (2 points)

There is **minimal/no** education for sustainable healthcare. (0 points)

Score Assigned:

4

*Score explanation:* Planetary health is incorporated in the pre-clinical and clinical years in multiple places.

This includes the Population Health course in MS2, pulmonology core course, pre-clinical week, cardiology core (heat stress and heart failure lectures in Cardiology (spring of M1) and the Anaesthesiology and OBGYN clerkships.

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

**1.22. Does your medical school 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?**

**Yes, the medical school has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)**

**No, the medical school does **not** have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)**

Score Assigned:

1

*Score explanation:* The Dean has assigned this task to the faculty in the Office of Sustainability in the Health Sciences.

**Section Total (46 out of 72)**

**64 %**

Back to Summary Page [here](#)

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

# 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, <b>OR</b> 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
<i>Score explanation:</i> There are faculty members at the medical school conducting research in environmental health, specifically in the Pulmonary Medicine and Obstetrics and Gynecology departments. A few faculty have primary research focus on planetary health. Dr. Woods researches the environmental impact of surgery. Dr. Maximous researches the effect of climate change and the environment on pulmonary health. Dr. Artsen conducts research on sustainable mesh materials with the aim to transform the field from using petroleum-based plastic mesh to sustainable and biodegradable materials.	

<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
<p><i>Score explanation:</i> Pitt opened the Office of Sustainability in the Health Sciences in 2024. There is a Center for Healthy Environments and Communities at the School of Public Health. There is also a Center for Climate and Global Change which is a multidisciplinary center for researchers which is based in the School of Arts &amp; Sciences. Finally there is the Mascaro Center for Sustainable Innovation which provides interdisciplinary research, education and engagement opportunities.</p>	

<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:	2
<p><i>Score explanation:</i> Pitt's Clinical and Translational Science Institute (CTSI) has a program called The Community PARTners Core which links researchers and the community by partnering with diverse community members and organizations to build on a community's strengths, as well as learn about health topics. For researchers, the Core's team helps develop studies that address the complex health questions which community partners state are most concerning. It provides training as well as funding opportunities for research development and partnered data collection. For community organizations, the Core assists with providing evidence-based research interventions and practices. It supports communities with "getting the word out" on health research awareness and education.</p>	

<b>2.4. Does your institution 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
<p><i>Score explanation:</i> The Office of Sustainability for the Health Sciences website: <a href="#">Home - Office of Sustainability for the Health Sciences</a></p> <p>An office that works to ensure that health science students learn how to care for the planet.</p> <p>Environmental Health &amp; Safety Home website provides access to safety protocols and guidelines for the campus. It covers topics such as chemical waste disposal and sustainability initiatives, our platform serves as a central hub to access important safety protocols and guidelines, ensuring a secure campus environment: <a href="#">Environmental Health &amp; Safety Home   Office of Public Safety &amp; Emergency Management</a></p> <p>The Pitt Sustainability website helps spread the word about sustainability efforts on campus and to update students/community about ongoing events and how to be involved: <a href="#">Home - Pitt Sustainability</a></p>	

<b>2.5. Has your <u>institution</u> recently hosted a conference or symposium on topics related to planetary health?</b>	
Yes, the <b>institution</b> has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)	
Yes, the <b>institution</b> has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)	
Yes, the <b>institution</b> has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)	
The <b>institution</b> has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)	
No, the <b>institution</b> has not hosted a conference on topics related to planetary health in the past three years. (0 points)	
Score Assigned:	4
<p><i>Score explanation:</i> The institution hosted the 17<sup>th</sup> annual sustainability symposium last April</p> <p>The Office of Sustainability in the Health Sciences hosted Pitt's first One Health Day in November 2024, with student research poster sessions, a plenary speaker, an interactive demo about climate change and heat stroke, and student awards. One Health Day explored topics of planetary health and the role of sustainability in advancing global health.</p>	

**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:

1

*Score explanation:* The University of Pittsburgh School of Medicine has been a member of the Global Consortium on Climate and Health Education since 2008.

**Section Total (16 out of 17)**

**94%**

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><i>Score explanation:</i> The broader University of Pittsburgh institution partners with several community organizations in the city of Pittsburgh on research projects, advocacy, and outreach. As an example, on February 25th, 2025, the University of Pittsburgh Office of Sustainability has partnered with with 1Hood Media and the August Wilson African American Cultural Center on a collaborative art competition focused on racial and environmental justice. Sub-Offices and research labs like the Pitt Center for Healthy Environments and Communities work with a broad range of community collaborators in the city to promote planetary and environmental health such as 3 Rivers Wet Weather, Water Resources Education Network (WREN) - project of League of Women Voters of PA, and Western PA Conservancy.</p> <p>Additionally, at UPSOM specifically, MS1 students attend required neighborhood tours in underserved areas experiencing climate injustice and meet community leaders of local nonprofits. Nonprofits visited include community gardens, and volunteer opportunities were discussed. In addition, Pitt Students for One Health is a student organization that focuses on improving health by acknowledging the complex intersection between people, animals, plants, and their shared environments. It has partnered with community organizations such as Tree Pittsburgh, Repair the World Pittsburgh, City of Pittsburgh Volunteer Clean Up, and the Pittsburgh East End Cooperative Garden in the past. This past academic year, Pitt Students for OneHealth has collaborated with partners such Just Say Chef, the Freeman Farm and Greenhouse, and Group Against Smog and Pollution - Pittsburgh.</p>	

**3.2. Does your institution offer community-facing courses or events regarding planetary health?**

The **institution** offers community-facing courses or events at least once every year. (3 points)

The **institution** 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 **institution** has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)

The **institution/medical school** have not offered such community-facing courses or events. (0 points)

Score Assigned:

1

*Score explanation:* The University of Pittsburgh School of Medicine supports a group called Clinicians for Climate Action that is open to clinicians in the area (with or without university affiliation). This group has participated in community facing events such as Children’s Environmental Health Day and Earth Day in partnership with other community organizations. They also host regular book clubs and online lectures.

Pitt Sustainability hosts online and in-person lectures and workshops on climate change, sustainability and planetary health. Many of these lectures are focused towards employees and students, but there are some external events that partner with local organizations. The Climate and Global Change Center at Pitt has organized events like mobile science labs and lectures, specifically directed to children in grades K-12.

**3.3. Does your institution have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?**

Yes, all students **regularly** 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 **some courses**. (1 point)

Students **do not** receive communications about planetary health or sustainable healthcare. (0 points)

Score Assigned:

1

*Score explanation:* The regular email updates from the School of Medicine sometimes includes communications on planetary health. The update email from 07/31/2024 discussed a new company founded by previous students focused on reducing laboratory landfill waste. Additionally, the frequent Health Sciences communications often include promotions for the recurring planetary health journal club as well as the Pitt One Health Day.

**3.4. Does the institution or main affiliated hospital trust 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?**

Yes, the **institution** or **main affiliated hospital trust** 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 **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate provider. (1 point)

There are **no** such accessible courses for post-graduate providers. (0 points)

Score Assigned:

1

*Score explanation:* This year the Office of Sustainability in the Health Sciences hosted the first One Health Day, a transdisciplinary forum on global health with presentations from various experts in the field of climate medicine and medical sustainability. Additionally, Magee-Womens hosts an annual Environmental Health Literacy Symposium for health care providers. The purpose of the symposium is to educate health care providers around current research in the field of environmental health and to supply tools to assist them in counseling patients. The UPMC CME catalog does not contain any course offerings on planetary health.

**3.5. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about environmental health exposures?**

Yes, the **medical school** or **all affiliated hospitals** 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:

1

*Score explanation:* Magee Women's Hospital includes environmental education in its programming for new parents. The free environmental health classes for child-bearing families includes education about environmental hazard reduction. This information is also included in their prenatal/postnatal online newsletter. These classes do not seem to be frequently offered. Not all hospitals have accessible patient education materials. The medical school does not have any accessible patient education materials on environmental health exposures. Additionally UPMC as a whole offers a Health Library which includes an article on Environmental Illness which addresses pollutants and their effect on health.

**3.6. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about the health impacts of climate change?**

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
<p><i>Score explanation:</i> All UPMC hospitals share the same UPMC website. As such, the patient facing UPMC “Healthbeat blog” covers the health impacts of climate change in a few articles that are written primarily for the education of their patients. Examples include an article written in late 2024 regarding an increase in incidence of tickborne illnesses due to climate change, and another article written in 2021 about more extreme allergy seasons due to climate change. However, these articles are few and far between, and additionally are not widely distributed to patients. As such, I would not call this type of educational material accessible.</p>	

<b>Section Total (8 out of 14)</b>	<b>57%</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.

4.1. Does your <b>institution</b> offer support for students interested in enacting a sustainability initiative/QI project?	
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
<p><i>Score explanation:</i> University of Pittsburgh offers <a href="#">numerous grants and awards</a> for students interested in pursuing sustainability projects. These grants are available for individual students (Pitt Green Fund), student groups (MCSI Student Group Sustainability Grants), building innovations (Sustainability Student Prototyping Grants), and events (Global Studies Center Student Center Student Organization Event Funding). This website highlights existing projects and details about how sustainable practices have been achieved across campus.</p>	

4.2. Does your <b>institution</b> offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?	
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
<p><i>Score explanation:</i> There are opportunities for students to get involved with research in planetary</p>	

health and sustainable healthcare sponsored by the Office of Sustainability in the Health Sciences. The Mascaro Center for Sustainable Innovation (MCSI) sponsors multiple summer research projects each year.

**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:* There is a School of Medicine website for the [Clinicians for Climate Action](#) group. This website includes faculty mentors, their contact information and specific advocacy and research interests. There is up to date information about ongoing projects, events, conferences, and achievements. Additionally, the [Office of Sustainability in the Health Sciences website](#) offers details and contact information for health science directors, as well as event details, and current research.

**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:* Each Health Science School (Dental Medicine, Medicine, Pharmacy, Health & Rehabilitation Sciences, Nursing, Public Health) has a student group focused on sustainability led by a faculty member. Other groups dedicated to planetary health include Pitt Students for One Health, the Global Health and Underserved Populations Group, and the Social Medicine Fellows



<b>4.5. Is there a student liaison representing sustainability interests who serves on a <u>department or institutional</u> decision-making council to advocate for curriculum reform and/or sustainability best practices?</b>	
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:</i> The Office of Sustainability in the Health Sciences (OSHS) has instituted a student advisory committee included representation from every Health Science school. OSHS also opened up applications for 2 health science students to join the office’s steering committee.	

<b>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)</b>	<b>Score</b>
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.	1
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	1
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1
<i>Score explanation:</i>	
<ol style="list-style-type: none"> <li>1. Plant2Plate Student Garden is a student organization at Pitt that manages an urban student garden near campus that provides fresh, organic produce for students and local food pantries.</li> <li>2. In November 2024, the Office of Sustainability in the Health Sciences hosted Pitt’s first One Health Day, focused on planetary health and sustainable healthcare. The event included student poster presentations, plenary speaker, student awards, and an interactive demonstration. Additionally, students in the School of Medicine host regular lunch and learns where physicians and community members can share their sustainability journeys.</li> </ol>	

3. In May, The School of Public Health hosts an Environmental Justice Summit. The summit addresses environmental health disparities, including cancer, due to environmental injustices and featured keynote speaker Sacoby Wilson. Multiple panels and activities throughout the day engaged attendees with community members, community organizations and academic researchers all interested in freeing ourselves and our communities from the environmental injustices that abound in our region. The summit included a one-day academic symposium with multiple community offerings.
4. The Mascaro Center for Sustainable Innovation and Clinicians for Climate Action is hosting an event on Feb. 13th exploring the University Art Gallery's three current exhibitions focused on the interaction of land and human industry.
5. Pitt Sustainability partners with Tree Pittsburgh to organize the [Tree Tender program](#).
6. [Outdoor and Adventure Pursuits](#) program offers urban hikes, local park hikes, bike rides, and stand up paddleboarding to students at Pitt.

<b>Section Total (15 out of 15)</b>	<b>100%</b>
-------------------------------------	-------------

Back to Summary Page [here](#)

*Are there additional student-led initiative resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.*

# 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.*

<b>5.1. Does your <u>institution</u> have an Office of Sustainability?</b>	
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 <b>at least one designated staff member</b> 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 <b>no specific staff member</b> in charge of hospital sustainability. (2 points)	
There are <b>no salaried sustainability staff</b> , but there is a sustainability task force or committee. (1 point)	
There are <b>no</b> staff members <b>or</b> task force responsible for overseeing campus sustainability. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i> The Office of Sustainability in the Health Sciences opened in 2023 including an associate, assistant dean, program manager, and project coordinator to work alongside the The University of Pittsburgh Office of Sustainability is directed by Dr. Aurora Sharrard. The University office of Sustainability employs 19 other staff members in addition to interns, campus leaders, green ambassadors, and affiliated faculty dedicated to university-wide, strategies, policies, collaborations and partnerships to advance the Pitt Sustainability Plan.</p>	

<b>5.2. How ambitious is your <u>institution's</u> plan to reduce its own carbon footprint?</b>	
The institution has a <b>written and approved plan</b> to achieve carbon neutrality by <b>2030</b> (5 points)	
The institution has a <b>written and approved plan</b> to achieve carbon neutrality by <b>2040</b> (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

*Score explanation:* In February 2020, the University of Pittsburgh's Board of Trustees, committed to carbon neutrality by 2037 and this encompasses the medical school. It has a clear climate action plan updated yearly that outlines the work needed to meet this goal and the progress so far. More information on the Climate Action Plan can be found here. Pitt is also actively tracking their progress through the sustainability dashboard.

<https://www.sustainable.pitt.edu/commitments-reports/pitt-climate-action-plan/>

**5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?**

Yes institution buildings are **100%** powered by renewable energy. (3 points)

Institution buildings source **>80%** of energy needs from off-site and/or on-site renewable energy. (2 points)

Institution buildings source **>20%** of energy needs from off-site and/or on-site renewable energy. (1 point)

Institution buildings source **<20%** of energy needs from off-site and/or on-site renewable energy. (0 points)

Score Assigned:

1

*Score explanation:* In calendar year 2021, 16.5% of Pitt's electricity was attributed to renewables, down from a pre-pandemic high of 23% in FY19. In calendar year 2022, 22.7% of Pitt's electricity was attributed to renewables; in calendar year 2023, 28.3% of the University's electricity originated from renewable energy sources. [Energy and Emissions - Pitt Sustainability](#)

**5.4. Are sustainable building practices utilised for new and old buildings on the institution's campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?**

Yes, sustainable building practices are utilised for new buildings on the institution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)

Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have **not been retrofitted**. (2 points)

Sustainable building practices are **inadequately or incompletely** implemented for new buildings. (1 point)

Sustainability is **not considered** in the construction of new buildings. (0 points)

Score Assigned:

3

*Score explanation:* All major renovation and new construction building projects at Pitt pursue LEED certification or better as part of the Pitt Sustainability Plan. There are 18 LEED certified spaces covering nearly 1.4 million square feet of space. [Buildings - Pitt Sustainability](#)

**5.5. Has the institution implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?**

Yes, the institution has implemented strategies to encourage and provide **environmentally-friendly transportation options** 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 **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised. (1 point)

The institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)

Score Assigned: 2

*Score explanation:* The University of Pittsburgh allows students, faculty and staff to avoid car commuting by offering fare-free service on all forms of Pittsburgh Regional Transit (PRT) throughout Allegheny County. Additionally, students and staff can utilize POGO bike share network through unlimited free 30-minute rides. Additionally, Pitt holds a Silver Bicycle Friendly Designation from the League of American Bicyclists and has recently renovated Bigelow Boulevard on campus to be a complete street with separated bike lanes. This information was sent to all students in an email and mentioned at new student orientation, and on the schools website. The fare-free service on PRT is highly utilized by students as parking on campus is expensive and limited..

**5.6. Does your institution have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?**

Yes, the institution has **both** compost **and** recycling programs accessible to students and faculty. (2 points)

The institution has **either** recycling **or** compost programs accessible to students and faculty, but not both. (1 point)

There is **no** compost or recycling program at the medical school. (0 points)

Score Assigned: 2

*Score explanation:* 13 buildings are collecting compostables in bathrooms and kitchenettes and Pitt Sustainability is working to expand on these locations. Pitt offers battery recycling, textile recycling, tone & ink cartridge recycling, and single stream recycling across campus

**5.7. Does the institution 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 **adequate** sustainability requirements for food and beverages, including meat-free days or no red-meat, and **is engaged** in efforts to increase food and beverage sustainability. (3 points)

There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)

There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)

There are **no** sustainability guidelines for food and beverages. (0 points)

Score Assigned:

2

*Score explanation:* Real Food Challenge at Pitt: In March 2015, the University of Pittsburgh committed to serving 20% local, fair, ecologically sound, and humane foods by 2020. At the time, only 9% of food served at Pitt’s primary dining hall (now The Eatery, formerly “Market Central”) fit the criteria of meeting at least one of the four requirements.

In early 2018, Pitt Dining announced it met its 20% Real Food goal at Market Central, Pitt’s main dining hall, two years early. At the same time, as part of the Pitt Sustainability Plan, the University strengthened its overall commitment to serve 25% Real Food campus-wide by 2025.

CoolFood Pledge: In 2019, the University of Pittsburgh was among the first signatories — and one of the first universities worldwide — to join in the CoolFood Pledge, a global initiative led by the World Resources Institute (WRI) to cut food-related greenhouse gas emissions by 25% by 2030.

**5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?**

Yes, the institution has **adequate** sustainability requirements for supply procurement **and is engaged** in efforts to increase sustainability of procurement. (3 points)

There are sustainability guidelines for supply procurement, but they are **insufficient or optional**. The institution is **engaged** in efforts to increase sustainability of procurement. (2 points)

There are sustainability guidelines for supply procurement, but they are **insufficient or optional**. The institution is **not engaged** in efforts to increase sustainability of procurement. (1 point)

There are **no** sustainability guidelines for supply procurement. (0 points)

Score Assigned:

2

*Score explanation:* The University of Pittsburgh has optional guidelines for sustainable supply procurement. The Pitt Surplus program facilitates material reuse by coordinating pickup/dropoffs of gently used supplies/furniture to exchange between departments, offices, and individuals for

repurposing. The University Stores and online purchasing tool provide designations for "sustainable picks" and "green program" endorsements. These criteria include local sourcing, use of sustainable materials, and climate neutral certifications.

[Materials & Waste Progress, 2018-22 - Pitt Sustainability](#)

LEED certification or better on all new construction and major renovations plans [Buildings - Pitt Sustainability](#)

UPMC purchasing with the goal of sustainability: [Sustainable Operations, UPMC Environmental Initiatives](#)

**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 "Pitt Green Host" program on the main campus provides a certification program for event hosts. The certification program includes online modules and a quiz for certification.

The online modules cover topics like food waste composting, zero waste, multiple attendance modalities, food for all dietary needs, and supply procurement. The training can be found here.

<https://www.sustainable.pitt.edu/get-involved/pitt-green-host-events/>

This allows hosts to access a Microsoft Teams site to request green resources for their event and gain support.

**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 University of Pittsburgh Office of Sustainability has a Pitt Green Labs

designation. The criteria for this designation can be found [here](#) and are based on Chemicals & Safety, Culture of Sustainability, Energy Consumption & Maintenance, Innovation Actions, Lab Recycling, Purchasing, and Water Conservation. There is a program where labs can fill out a self-assessment to receive points for a laboratory designation. The University of Pittsburgh currently has 42 Green Labs.

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

The institution is **entirely divested** from fossil fuels **and** has made a **commitment to reinvest divested funds** into renewable energy companies or renewable energy campus initiatives. (4 points)

The institution is **entirely divested** from fossil fuels. (3 points)

The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments. (2 points)

The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment. (1 point)

Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that. (0 points)

Score Assigned:

2

*Score explanation:* According to the May 2024 Consolidated Endowment Fund: Environmental, Social, and Governance Report, 2022-23, the Universities endowment fund has 8.2% exposure to fossil fuel holdings. This is a slight increase from 8.1% in 2022.

**Section Total (23 out of 32)**

**72%**

Back to Summary Page [here](#)

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



# 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 University of Pittsburgh School of Medicine

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

Section	Raw Score %	Letter Grade
<b>Planetary Health Curriculum (30%)</b>	$(46/72) \times 100 = 64\%$	B-
<b>Interdisciplinary Research (17.5%)</b>	$(16/17) \times 100 = 94\%$	A
<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>	$(15/15) \times 100 = 100\%$	A+
<b>Campus Sustainability (17.5%)</b>	$(23/32) \times 100 = 72\%$	B
<b>Institutional Grade</b>	$(A \times 0.3 + B \times 0.175 + C \times 0.175 + D \times 0.175 + E \times 0.175) = 76\%$	<b>B+</b>

# Report Card Trends

## Section Overview

This graph demonstrates trends in overall and section grades for the years in which The University of Pittsburgh has participated in the Planetary Health Report Card initiative.

Planetary Health Report Card Trends for University of Pittsburgh School of Medicine

