# Planetary Health Report Card (Medicine) 2026:

## *Stanford University*

2025-2026 Contributing Team:

- Students: Patton Khuu Nguyen, Aparna Reddy, Anjali Prabhakaran, Sonya Gupta, Julia Li, Riya Bhatia
- Faculty Mentors: Barbara Erny

*Primary Contact: Patton Khuu Nguyen, pkn@stanford.edu

Land acknowledgment: Stanford sits on the ancestral land of the Muwekma Ohlone Tribe. This land was and continues to be of great importance to the Ohlone people. Consistent with our values of community and inclusion, we have a responsibility to acknowledge, honor, and make visible the University's relationship to Native peoples.

# Summary of Findings

| Overall Grade | A |
|---|---|

| Curriculum | B |
|---|---|

- Electives such as MED103, EMED234, EPI248, and MED171 provide an overview of the most salient topics in planetary health (PH). Some core medical school curriculum now contains and applies PH content, and there is growing buy-in at most levels of instruction and from many core Medical School course faculty.
- Stanford core curriculum lacks consistent and appropriate emphasis on PH in a meaningful, longitudinal way. The three greatest areas of need for improvement are curriculum focused on: 1. The inequitable distribution of climate change and environmental hazards' burden locally and globally on marginalized communities. 2. Skills training for effective clinical application of PH concepts, particularly to take exposure histories and advocating for patients. 3. The impact of the healthcare system on climate change and how students can function as physician leaders to drive sustainability efforts.

| Interdisciplinary Research | A |
|---|---|

- Scholars and students at Stanford have many diverse opportunities to engage in interdisciplinary PH research, notably through the Woods Institute for the Environment and Stanford Center for Innovation in Global Health (CIGH), and the Stanford Doerr School of Sustainability. Medical student engagement in these opportunities is well-supported, and CIGH offers a PH post-doc fellowship, indicating institutional investment.
- Centralization and promotion of existing Stanford Office of Sustainability, Woods Institute, CIGH, Stanford Doerr School of Sustainability, and School of Medicine resources and opportunities in PH is necessary to increase student, community, and patient exposure to and engagement with PH.

| Community Outreach and Advocacy | A |
|---|---|

- Though there are many independent opportunities for students and faculty to engage in community advocacy and outreach, there are not institutional partnerships. However, various student groups partner with community organizations to address local planetary health challenges. To improve though, the university could itself directly partner with community organizations and members.
- There are many opportunities for the community beyond university affiliates to learn about and engage with planetary health. From research convenings to speaker events, Stanford University and Stanford Medical School have made meaningful efforts since the last report card to improve public and university wide education about planetary health. However, these are opt-in opportunities and one area for improvement could be to ensure every medical student knows about these opportunities and understands specific climate/health challenges facing our community/patients.
- Creation of more patient-facing resources is an essential step in leveraging Stanford School of Medicine's prerogative to supply necessary PH information and guidance to patients.

| Support for Student-Led Initiatives | A |
|---|---|

- Stanford has strong institutional support for student-led planetary health (PH) initiatives by funding PH research, sustainability/QI projects, and community outreach through mechanisms like MedScholars, Mel Lane Grant, Living Laboratory Fellowship, Stanford Sustainability Accelerator Fellowship, Doerr School of Sustainability programs, E-IPER, and Center for Human and Planetary Health seed grants/awards
- Stanford Climate and Health is a well-supported, faculty-advised cross-campus student group and hub, with student liaisons contributing to the CLIME initiative.
- Centralizing and officially promoting these PH resources, webpages, and mentor directories is a key growth opportunity to streamline student access.

| Campus Sustainability | B |
|---|---|

- Stanford is consistently ranked among the most sustainable universities. With an Office of Sustainability at both the university and hospital, 100% renewable electricity since 2022, LEED-recognized sustainable buildings and retrofits, extensive low-carbon transport including all-electric Marguerite buses and carpool incentives, robust composting and recycling toward zero waste by 2030, Green Labs support, and procurement standards that favor environmentally preferable, life-cycle smart purchasing, sustainability is a key priority at the university.
- Key opportunities include implementing sustainability requirements for all events, expanding sustainable food initiatives to include meatless days, and accelerating the divestment from fossil fuels, reinvestment in clean energy, and carbon neutrality targets (ie. targeting carbon neutrality by 2030 or 2040).

# 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 health professional 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 health professional training. It is imperative that we hold our institutions accountable for educating health professional 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) school campus sustainability.

# 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 health professional 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 (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 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 the 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.

- **Extractivisim:** 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).

**Scoring Matrix**

- Elective coursework (1 point): 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 (2 points): 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. At minimum brief inclusion would qualify as inclusion in a single lecture slide in a single year.
- In depth coverage in the core curriculum (3 points): 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.

**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.

Updated in 2025, a complete literature review by metric is available for the 2024/25 Medicine Report Card Template. This largely translates across disciplines although we are hoping to expand this process across all of our covered disciplines. A link to the 2025 literature review by metric is available here.

# Planetary Health Curriculum

***Section Overview:*** ***This section evaluates the integration of relevant planetary health topics into the medical school curriculum.*** *Today's health professional students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that 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***

| **1.1. Did your medical school offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?** | |
|---|---|
| **Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year. (3 points)** | |
| Yes, the medical school has offered **one** elective whose primary focus is ESH/planetary health in the past year. (2 points) | |
| The medical school does **not** have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a **lecture** on planetary health. (1 points) | |
| No, the medical school has **not** offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points) | |
| Score Assigned: | 3 |
| *Score explanation:*<br>The medical school offers the elective EMED 134: The Impact of Climate Change on Human Health, HUMBIO 114: Global Change and Emerging Infectious Disease, and MED 294: Global Health: Through an Equity Lens. Medical students also have the opportunity to take planetary health electives offered by other departments within Stanford, including the Woods Institute for the Environment; the Program for Disease Ecology, Health, and Environment; and the Center for Innovation in Global Health. | |

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

| **1.2. Does your medical school curriculum address the relationship between extreme heat, health risks, and climate change?** |
|---|
| **Yes, 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:*<br>Touched on in several lectures of both the Science of Medicine and Practice of Medicine M1 and M2 core course curriculum as a result of last year's advocacy. Notably, during discussions of mental health, pulmonology, cardiology, renal, and endocrine. It was also addressed more extensively in the elective EMED 134: The Impact of Climate Change on Human Health. The socioeconomic disparities of extreme heat distribution are not covered in the core curriculum and pose an opportunity for improvement. | |

| **1.3. Does your <u>medical school</u> curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?** | |
|---|---|
| **Yes, 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:*<br>Touched on in several lectures of the Practice of Medicine M1 core course curriculum, notably, during discussions of mental health and population health. New additions have been made in 2025 to also include extreme weather effects on epigenetics in our introductory genetics course (GENE 202), and on renal and skin health in our science of medicine course (SOM). It was also addressed extensively in the elective EMED 134: The Impact of Climate Change on Human Health. | |

| **1.4. Does your <u>medical school</u> curriculum address the impact of climate change on the changing patterns of infectious diseases?** | |
|---|---|
| **Yes, 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:*<br>The first-year and second year microbiology course discusses environmental contributions to pathogenic transmission and infection. In the Q2 course, the lectures highlight how Coccidiomycosis is impacted by climate change. Additionally, the Q2 immunology course | |

| |
|---|
| discusses the ‘meningitis belt’ and how this region is evolving due to changing patterns in humidity. In the Fall, Q5 module, students learn about emerging zoonoses and “One Health”, which discusses how human and animal health are linked, as well as describes how climate change impacts this One-Health link. In addition, the medical school elective Impact of Climate Change on Human Health has a session dedicated specifically to infectious disease and climate change, taught by Professor Desiree Labeaud. |

| **1.5. Does your <u>medical school</u> curriculum address the respiratory health effects of climate change and air pollution?** | |
|---|---|
| This topic was explored **in depth** by the **core** curriculum. (3 points) | |
| **Yes, 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:*<br>The Stanford Medical School curriculum addresses how pollution can be an exacerbating factor for asthma, emphysema, and lung cancer in the Science of Medicine course. Additionally, this topic is covered in depth in the Human Health and Climate Change elective. | |

| **1.6. Does your <u>medical school</u> curriculum address the cardiovascular health effects of climate change, including increased heat** | |
|---|---|
| This topic was explored **in depth** by the **core** curriculum. (3 points) | |
| **Yes, 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:*<br>The topic is covered briefly in the cardiology seminars of the M1 core curriculum. An extensive discussion of climate change, increasing temperatures, and heat stroke was covered in EMED 234: The Impact of Climate Change on Human Health. | |

| **1.7. Does your <u>medical school</u> curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?** |
|---|

| **Yes, 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:*<br>In the mandatory pre-clerkship curriculum, there is a discussion of Behavioral Determinants of Health and ACEs, and the link between life adversity and physical/mental health is discussed. Furthermore, in the Q1 thread, a lecture on anxiety disorders was discussed in relation to climate change and environmental degradation, and a lecture on population health discussed connections between environmental health and mental disorders. Dr. Daniel Bernstein presented a detailed lecture on the impacts of climate change on mental health in the medical school elective EMED 234: The Impact of Climate Change on Human Health. | |

| **1.8. Does your <u>medical school</u> 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. (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:*<br>This topic is covered in various threads of the Practice of Medicine course including Nutrition and Population Health, as well as in electives like EMED 134: The Impact of Climate Change on Human Health, and ORTHO 120: Introduction to Lifestyle Medicine. | |

| **1.9. Does your <u>medical school</u> curriculum address the outsized impact of climate change on marginalised populations such as those with low SES, women, communities of colour, Indigenous communities, children, homeless populations, and older adults?** |
|---|
| This topic was explored **in depth** by the **core** curriculum. |
| This topic was **briefly** covered in the core curriculum. |
| This topic was covered in **elective** coursework. |
| This topic was **not** covered. |

| | |
|---|---|
| Score Assigned: | 3 |
| This topic is covered in depth in the Population Health thread of the M1 and M2 Practice of Medicine (POM) course, as well as in the elective EMED 134: The Impact of Climate Change on Human Health. For example, our POM course describes the adverse effects of climate change exacerbating eco-anxiety and psychiatric disorders in marginalized populations. Problem Based Learning (PBL) cases also cover the effects of climate change on marginalized populations. | |

| **1.10. Does your <u>medical school</u> curriculum address the unequal regional health impacts of climate change globally?** | |
|---|---|
| **Yes, 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:*<br>The M1 core curriculum includes the effects of regional health impacts due to climate change as a growing factor in spread of infectious diseases. In the M2 core curriculum, the effects of drought and rising temperatures on the epidemiology of kidney stones are discussed as a complicating factor causing increased incidence. Several elective courses cover this concept in depth, including EMED 234: The Impact of Climate Change on Human Health, MED 285: Global Leaders and Innovators in Human and Planetary Health, and PEDS 223: Human Rights and Global Health. | |

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

| **1.11. Does your <u>medical school</u> curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?** | |
|---|---|
| This topic was explored **in depth** by the **core** curriculum. (3 points) | |
| **Yes, 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:*<br>Discussions in science of medicine lectures as well as Q1 Embryology briefly touch on environmental exposures and reproductive health effects. Dr. Zlatnik presented a lecture on the impact of environmental exposures such as air pollution on pregnancy outcomes in the medical school elective EMED 234: The Impact of Climate Change on Human Health. | |

| **1.12. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?** | |
|---|---|
| This topic was explored **in depth** by the **core** curriculum. (3 points) | |
| **Yes, 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:*<br>This was discussed in our core curriculum for M1 Year, as our Population Health thread of the Practice of Medicine Course addresses the impact of wildfires and urban pollutants on the health of Californian communities, in the session "Role of Community Partnerships." | |

| **1.13. To what extent does your medical school emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?** | |
|---|---|
| This topic was explored **in depth** by the **core** curriculum. (3 points) | |
| This topic was **briefly** covered in the **core** curriculum. (2 points) | |
| **Yes, this topic was covered in elective coursework. (1 point)** | |
| This topic was **not** covered. (0 points) | |
| Score Assigned: | 1 |
| *Score explanation:*<br>To our knowledge, this is not covered in the core curriculum, however is covered to some degree in several electives, most notably URBANST 155A: Environmental Justice Colloquium, which integrates historical perspectives with present challenges in environmental justice, covering topics in planetary health. | |

| **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?** |
|---|
| **Yes, 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:*<br>This topic is covered in-depth by Dr. David Chang in the Population Health thread of the M1 Practice of Medicine course, as well as in the elective EMED 134: The Impact of Climate Change on Human Health. Topics include diesel exhaust from cars and urbanization and lack of green spaces or parks as a contributor to environmental pollution. | |

***Curriculum: Sustainability***

| **1.15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet?** | |
|---|---|
| **Yes, 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:*<br>M1 Q1 nutrition core curriculum lectures include information about the intersection between human health and environmental health. For example, lectures discuss how shifting to a plant-based diet impacts greenhouse gases and how efforts to eat more sustainably have human and environmental co-benefits. Additionally, this topic was covered in depth in EMED 234: The Impact of Climate Change on Human Health in a lecture by Dr. Barbara Erny and Dr. Tamiko Katsumoto. | |

| **1.16. Does your <u>medical school</u> 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. | |
| **Yes, this topic was covered in elective coursework.** | |
| This topic was **not** covered. | |
| Score Assigned: | 1 |
| *Score explanation:*<br>To our knowledge, this is not covered in the core curriculum; however it's covered in the elective EMED 234: The Impact of Climate Change on Human Health in a lecture by Dr. Paige Fox, as well as being mentioned in some contexts in clerkships by faculty who are advocates in this area. | |

| **1.17. Does your medical school curriculum cover these components of sustainable clinical practice in the core curriculum? (points for each)** | **Score** |
|---|---|
| The health **and** environmental **co-benefits** of **avoiding** over-medicalisation, over-investigation and/or over-treatment (2 points) | 0 |
| The environmental impact of **pharmaceuticals** and over-prescribing as a cause of climate health harm. Alternatively teaching on **deprescribing** where possible and its environmental and health co-benefits would fulfil this metric. (2 points) . | 0 |
| The health **and** environmental **co-benefits** of **non-pharmaceutical management** 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) | 1 |
| Environmental impact of **surgical** healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point) | 1 |
| The impact of **anaesthetic** gases on the healthcare carbon footprint and ways to reduce anaestheisa'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 **inhalers** on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point) | 1 |
| **Waste production** within healthcare **clinics** and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting) (1 point) | 1 |
| *Score explanation:*<br>To our knowledge, while the health benefits of over-medicalization, non-pharmaceutical interventions, and antibiotic stewardship are discussed in the core curriculum, some connections are made to the coexisting environmental benefits of these practices. For example, our SURG 234: Service Through Surgery: Surgeons with an Impact, EMED 234: The Impact of Climate Change on Human Health, and M2 Pharmacology course describes how surgeons can reduce surgical and hospital waste, and how anesthetics can contribute to greenhouse gas emissions. | |

***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: | 2 |
| *Score explanation:*<br>A guide to taking a patient's social and environmental history was created and shared with residency and clerkship students. This topic is covered in EMED 234: The Impact of Climate Change on Human Health. | |

| **1.19. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies for taking an environmental history or exposure history?** | |
|---|---|
| **Yes, the core curriculum includes strategies for taking an environmental history. (2 points)** | |
| Only **elective** coursework includes strategies for taking an environmental history. (1 point) | |
| No, the curriculum does not include strategies for taking an environmental history. (0 points) | |
| Score Assigned: | 2 |
| *Score explanation:*<br>Students are introduced to how to take a social and environmental health history later in their clerkship and residency to prepare them for patient encounters. It is also covered in the elective EMED 134: The Impact of Climate Change on Human Health. | |

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

| **1.20. Is your <u>medical school</u> 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:*<br>Dr. Barabara Erny serves as a climate health curriculum leader and works with Science of Medicine course directors to incorporate relevant climate health concepts into this thread. The CLIME initiative, in collaboration with students and faculty, also serves to improve education on ESH/planetary health education by integrating climate health into pre-clerkship, clerkship, and residency training materials. | |

| **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:*<br>While some environmental health topics are incorporated into existing lectures (ie. pollution in pulmonary system block, environmental toxins in reproductive health block, etc.), such topics are only thoroughly addressed in electives. | |

| **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:*<br>Dr. Barabara Erny serves as a climate health curriculum leader and works with Science of Medicine course directors to incorporate relevant climate health concepts into this thread. | |

| **1.23. Does your health professional curriculum include teaching on civic engagement/advocacy to address the environmental and structural determinants of health?** |
|---|
| This topic was explored **in depth** by the **core** curriculum. (3 points) |
| **Yes, 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:*<br>This topic is covered briefly in our Population Health thread of the M1 Practice of Medicine Course, in global health electives such as MED 242: Human Rights and Health and EMED 134: The Impact of Climate Change on Human Health. Topics include policy change at the county-level to promote national park access as “green prescriptions” to patients. | |

| | |
|---|---|
| **Section Total (59 out of 75)** | **79%** |

Back to Summary Page here

.

# Interdisciplinary Research

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

| **2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your institution?** | |
|---|---|
| **Yes, there are faculty members at the institution who have a primary research focus in planetary health or sustainable healthcare/vetcare. (3 points)** | |
| Yes, there are individual faculty members at the **institution** who are conducting research **related** to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points) | |
| There are sustainability researchers at the **institution**, but not specifically associated with healthcare/vetcare. (1 point) | |
| No, there are **no** planetary health and/or sustainability researchers at the **institution** at this time. (0 points) | |
| Score Assigned: | 3 |
| *Score explanation:*<br>Stanford's Center for Human and Planetary Health (HPH) enables and drives solutions-oriented research that leads to real-world solutions. Many of the HPH affiliates, medical school, and Doerr school faculty are involved with research focused on a range of planetary health topics including heavy metals, climate change and vector borne disease, wildfire impacts on health, and more. Dr. LaBeaud's Lab for example focuses on trash and disease transmission. | |

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

| | |
|---|---|
| There is **no** dedicated department or institute. (0 points) | |
| Score Assigned: | 3 |
| *Score explanation:*<br>There is a Center for Human and Planetary Health, which collaborates with the Stanford Doerr School of Sustainability and the Stanford School of Medicine. Research from this center focuses on the intersection of communities, health, sustainability, and the environment. | |

| **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?** | |
|---|---|
| Yes, there is a process in which community members impacted by climate and environmental injustice have **decision-making power** in the climate + environmental research agenda. (3 points) | |
| **Yes, there is a process in which community members impacted by climate and environmental injustice advise the climate + environmental research agenda. (2 points)** | |
| **No**, but there are **current efforts** to establish a process for community members to advise or make decisions on the research agenda. (1 points) | |
| There is **no** process, and **no** efforts to create such a process. (0 points) | |
| Score Assigned: | 2 |
| *Score explanation:*<br>The Stanford Haas Center works with community organizations focused on environment and health challenges. The Environmental justice working group also collaborates with community groups, such as those affected by food and health inequality and gives them the opportunity to co-design interventions and contribute to bi-annual events. Most recently, Stanford launched a center for Just Environmental Futures which focuses on advancing research and education that integrate community-level needs into sustainability efforts. | |

| **2.4. Does your institution have a planetary health website that centralises ongoing and past research related to health and the environment?** |
|---|
| **There is an easy-to-use, adequately comprehensive website that centralises 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 **attempts to centralise** various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. (2 points) |
| The **institution** has an **Office of Sustainability website** that includes **some** resources related to health and the environment. (1 point) |

| | |
|---|---|
| There is **no** website. (0 points) | |
| Score Assigned: | 3 |
| *Score explanation:*<br>Yes, the Stanford Center for Human and Planetary Health has a comprehensive website that has information on upcoming events, funding opportunities, working groups, and faculty doing planetary health research. | |

| **2.5. Has your institution recently hosted a conference or symposium on topics related to planetary health?** | |
|---|---|
| **Yes, the institution has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)** | |
| Yes, the **institution** has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points) | |
| Yes, the **institution** has hosted a conference on topics related to planetary health / sustianable healthcare/vetcare in the past three years. (2 points) | |
| The **institution** has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point) | |
| No, the **institution** has not hosted a conference on topics related to planetary health in the past three years. (0 points) | |
| Score Assigned: | 4 |
| *Score explanation:*<br>Stanford co-hosted the 2024 NorCal Symposium on Climate, Health, and Equity and the Sustainability Conference on Climate Change in 2024.<br>Stanford hosted a Global and Planetary Health Research Convening in January 2026. | |

| **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:*<br>Yes, The Stanford Center for Global Health and Center for Human and Planetary Health collaborate closely with and are a part of the Planetary Health Alliance. | |

| 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.*

| **3.1. Does your institution partner with community organisations to promote planetary and health?** | |
|---|---|
| **Yes, the institution meaningfully partners with multiple community organisations to promote planetary and environmental health. (3 points)** | |
| Yes, the institution meaningfully partners with **one** community organisation to promote planetary and environmental health. (2 points) | |
| The institution **does not** partner with community organisations, but has participated in community focused events relating to planetary health. (1 point) | |
| No, there is **no** such meaningful community partnership. (0 points) | |
| Score Assigned: | 3 |
| *Score explanation:*<br>While the university doesn't partner with multiple organizations, student groups spanning the Medical School and Stanford's other schools work closely with many community organizations to promote planetary health. The Stanford Climate and Health student group, for example, works closely with Climate Resilient Communities to address local environmental health challenges. In 2025, they led an extreme heat intervention in North Fair Oaks, a local community disproportionately impacted by extreme heat. Additionally, medical students have partnered with St. Anthony's Padua Dining Room, a local soup kitchen in Menlo Park, to promote climate health knowledge on wildfire resources and provide community members kits with N-95s and air purifiers. | |

| **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: | 3 |

*Score explanation:*
The Center for Human and Planetary Health hosts regular working groups on various planetary health topics including plastics and food systems change. These meetings are open to community members beyond university affiliates. The Center for Human and Planetary Health also hosts spotlight speaker events featuring university affiliated and non-university affiliated planetary health experts which open to everyone. There's also an annual global and planetary health research convening, at which community members can learn about and engage with planetary health research. Stanford also co-hosts/collaborates on the NorCal Climate and Health Symposium.

| |
|---|
| **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: | 2 |

*Score explanation:*
The Stanford Center Human and Planetary Health sends out a regular weekly email that covers topics related to human and planetary health, including relevant news, events and opportunities. Further, the Center for Global Health and other departments on campus produce emails that frequently include planetary health related updates. Unfortunately these updates are generally opt-in and not well-read by medical students. More work can be done in this space such as making the newsletters opt-out, rather than opt-in. CLIME also works to integrate climate/health topics and updates into medical school course materials across topics/specialties.

| |
|---|
| **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: | 2 |
| *Score explanation:*<br>Stanford offers 10 mini-cases through the Center for Continuing Medical Education (CME) and Medicine for a Changing Planet that are focused on planetary health. However, many do not know about these opportunities. More work needs to be done to promote this opportunity. | |

| | |
|---|---|
| **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: | 2 |
| *Score explanation:*<br>Patient education materials provided post-visit available at all Stanford affiliated clinics contain environmental health information. This information, however, is not freely outside of being provided post-appointment or specifically requesting it from a provider. It is unclear, however, whether these resources are adequate | |

| | |
|---|---|
| **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 **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 a**ffiliated hospitals** have accessible educational materials for patients. (0 points) | |
| Score Assigned: | 1 |
| *Score explanation:*<br>Stanford Health Care has educational videos that highlight how the environment impacts health and on sustainable practices (reducing waste, diet changes, etc). These resources aren't available in many languages though, and they don't appear to be targeted directly toward patients. They also don't explain specific climate-health challenges and how patients can protect themselves from these challenges. Stanford Climate and Health is working to change this by creating physician backed | |

| |
|---|
| materials directed toward educating patients about climate threats to their health. The group recently made an extreme heat brochure in English and Spanish with relevant local resources. |

| | |
|---|---|
| **Section Total (13 out of 14)** | **93%** |

Back to Summary Page here

# 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 institution offer support for students interested in enacting a sustainability initiative/QI project?** | |
|---|---|
| **Yes, the institution *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum. (2 points)** | |
| The **institution** encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, **but** there is no student funding available and there is no requirement to participate. (1 point) | |
| No, **neither** the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects. (0 points) | |
| Score Assigned: | 2 |
| *Score explanation:*<br>The Mel Lane Grant and the Living Laboratory Fellowship for Sustainability are the primary funding opportunities for student-led sustainability and environmental projects. Other research funding opportunities, including MedScholars and Stanford Sustainability Accelerator Fellowship, also provide funding for projects that incorporate sustainability, community engagement, and climate resilience initiatives. | |

| **4.2. Does your institution offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?** | |
|---|---|
| **The institution has a specific 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 **require student initiative** to seek these out and carry them out in their spare time. (1 point) | |
| There are **no opportunities** for students to engage in planetary health/sustainable healthcare research. (0 points) | |
| Score Assigned: | 2 |
| *Score explanation:*<br>The Stanford Center for Human and Planetary Health provides the following Human and Planetary Health funding opportunities: 1) Early-Career Human and Planetary Health Research Awards up to | |

| |
|---|
| $200,000; 2) Stanford / London School of Hygiene and Tropical Medicine Human and Planetary Health Postdoctoral Fellowship; and 3) Human and Planetary Health Research Seed Grants up to $50,000. Numerous departments and schools offer additional funding opportunities specific to planetary health and sustainability for medical students. Examples include opportunities through the Stanford Doerr School of Sustainability, Emmett Interdisciplinary Program in Environment and Resources. |

| **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:*<br>Stanford University, and its Medical School and affiliated faculty provide resources, funding opportunities, research initiatives, advocacy options, and other specific information on interdisciplinary platforms, including the Sustainability Graduate Certificate in Climate Change. The Stanford Center for Innovation in Global Health features a website that offers information, projects, and opportunities, along with a faculty directory that can be sorted by interests and research areas, including sustainability and planetary health topics. There is potential for enhancement by integrating these resources to improve access to information related to planetary health. | |

| **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:*<br>Stanford Climate and Health is a registered student organization that receives departmental financial support from the Medical School and Center for Human and Planetary Health. It's increasingly been recognized throughout the institution, especially because of Stanford CLIME: Climate Learning Initiative in Medical Education, which is affiliated with Stanford Climate and Health. | |

| **4.5. Is there a student liaison representing sustainability interests who serves on a department or institutional decision-making council to advocate for curriculum reform and/or sustainability best practices?** | |
|---|---|
| **Yes, there is a student representative that serves on a department or institutional decision-making council/committee. (1 points)** | |
| No, there is no such student representative. (0 points) | |
| Score Assigned: | 1 |
| *Score explanation:*<br>Yes, student liaisons participate in the Stanford University Medical School CLIME Initiative. The CLIME initiative, supported by a network of faculty, integrates climate health, equity, and healthcare sustainability into the Stanford School of Medicine curriculum. By creating specialty-specific and cross-disciplinary curricula on climate and health, CLIME prepares future physicians to address the impacts of climate change on health and equity while promoting sustainable medical practices. Importantly, student voices are included, ensuring their perspectives shape these educational programs. | |

| **4.6. In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)** | **Score** |
|---|---|
| Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects. | 1 |
| Panels, speaker series, or similar events related to planetary health that have students as an intended audience. | 1 |
| Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts. | 1 |
| Cultural arts events, installations or performances related to planetary health that have students as an intended audience. | 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 |
|---|---|

*Score explanation:*
The O'Donohue Family Stanford Educational Farm serves as a "learning lab" dedicated to sustainable agriculture, providing students from across the university the chance to take classes and gain hands-on experience in the outdoors. Stanford also offers several Community Supported Agriculture (CSA) opportunities for students.

Additionally, Stanford hosts the Global Health Research Methods retreat, which focus on planetary health topics.

Stanford Doerr School of Sustainability also hosts arts events related to planetary health through dedicated courses and a visiting artists for sustainability program launched in 2024.

Thanks to the efforts of the Stanford Climate and Health student group, several community partners engaged in environmental justice collaborate with Stanford Medical School students to address local environmental justice issues and initiatives.

| **Section Total (15 out of 15)** | **15%** |
|---|---|

Back to Summary Page here

# Campus Sustainability

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

| **5.1. Does your institution have an Office of Sustainability?** | |
|---|---|
| **Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital. (3 points)** | |
| There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but **no specific staff member** in charge of hospital sustainability. (2 points) | |
| There are **no salaried sustainability staff,** but there is a sustainability task force or committee. (1 point) | |
| There are **no** staff members **or** task force responsible for overseeing campus sustainability. (0 points) | |
| Score Assigned: | 3 |
| *Score explanation:*<br>Yes, Stanford University has an office of sustainability with full-time staff dedicated to campus sustainability. The office offers multiple paid fellowship opportunities for students to directly engage with campus sustainability initiatives. Stanford Health Care has its own sustainability office, led by Helen Wilmot with multiple full time staff, including two physicians who serve as medical directors of sustainability. | |

| **5.2. How ambitious is your institution's plan to reduce its own carbon footprint?** | |
|---|---|
| The institution has a **written and approved plan** to achieve carbon neutrality by **2030** (5 points) | |
| The institution has a **written and approved plan** to achieve carbon neutrality by **2040** (3 points) | |
| The institution has a stated goal of carbon neutrality by **2040** but has **not created a plan** to reach that goal or the **plan is inadequate** (1 point) | |
| **The institution/medical school does not meet any of the requirements listed above (0 points)** | |
| Score Assigned: | 0 |

| |
|---|
| *Score explanation:*<br>Stanford University and Stanford Healthcare have written and approved to achieve carbon neutrality by 2050. Stanford Health Care committed to reducing its Scope 1 and 2 emissions by 50% by 2030. |

| **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: | 3 |
| *Score explanation:*<br>Stanford completed the university's transition to 100% renewable electricity in 2022. | |

| **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:*<br>Stanford Health Care, under which the majority of Stanford Medical School's buildings fall, has received Environmental Excellence awards from Practice GreenHealth for the past four years consecutively both for renovations of old buildings and sustainable practices in new buildings including a Silver and a Platinum LEED certification for its two newest hospital buildings. | |

| **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:*<br>Stanford's support and incentivization of sustainable transport is substantial, beginning with encouraging students to live on-campus to allow for a short commute. The university is a Platinum Bicycle Friendly University as designated by the League of American Bicyclists. In addition, Stanford's Marguerite buses provide all-electric transport, all of which are equipped with bicycle racks. The university also has subsidized vanpool and carpool incentive programs. | |

| **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:*<br>Stanford University has attained a landfill diversion rate of 69% through its robust initiatives in reuse, recycling, and composting. The university has a zero-waste action plan with a goal of achieving zero waste by 2030. Stanford Health Care and medical school also have compost and recycling initiatives that ensure that composting/recycling are readily available. | |

| **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 s**ustainability 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:*<br>Stanford University has fairly robust efforts to support as well as research sustainable food. In 2016, Stanford Health Care (SHC) underwent a food transformation that emphasized sustainable procurement and options. Stanford University R&DE (which serves 800+ meals per day to university students, staff, faculty, visitors, etc.) has also created a One Plate, One Planet initiative which aims to procure local food, encourage plant based eating by offering plant based options and presenting them intentionally, and minimizing food waste. | |

| **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: | 3 |
| *Score explanation:*<br>Stanford University procurement guidelines are found here, and require the application of specific sustainability metrics toward meeting the University's zero waste 2030 and related sustainability goals. These metrics take into account Environmentally Preferable Products (including services) and taking into account quality and Life Cycle Cost. | |

| **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 Stanford Office of Sustainability supports and strongly recommends sustainability measures in event planning across the University's departments. The Sustainability Office has many resources including a robust Sustainable Events tool available for event planners.

| **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 Stanford Office of Sustainability has a Green Labs program which supports, incentivizes, and promotes sustainable practices in labs. Resources they provide include in-lab recycling collection, energy-efficient equipment rebates, surplus chemical sharing, tips for conserving water, and tools like outlet timers and cold-storage optimization guides.

| **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:*<br>The Board of Trustees has committed to full divestment and reinvestment in renewable energy by 2050, and has thus far reduced active fossil fuel holdings in Stanford's Merged Pool of investments by more than 90% . We are hopeful that full divestment will be achieved in the near term and believe this is an area of opportunity of advocacy for students and leaders at the Medical School. | |

| | |
|---|---|
| **Section Total (23 out of 32)** | **72%** |

# 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+.*

**Planetary Health Grades for the Stanford School of Medicine.**
The following table presents the individual section grades and overall institutional grade for the Stanford School of Medicine on this Planetary Health Report Card.

| Section | Raw Score % | Letter Grade |
|---|---|---|
| **Planetary Health Curriculum (30%)** | (59/75) x 100 = 79% | B |
| **Interdisciplinary Research (17.5%)** | (16/17) x 100 = 94% | A |
| **Community Outreach and Advocacy (17.5%)** | (13/14) x 100 = 93% | A |
| **Support for Student-led Planetary Health Initiatives (17.5%)** | (15/15) x 100= 100% | A |
| **Campus Sustainability (17.5%)** | (23/32) x 100 = 72% | B |
| **Institutional Grade** | **(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 86%** | **A** |

# Report Card Trends

**Section Overview**
This graph demonstrates trends in overall and section grades for the years in which Stanford University has participated in the Planetary Health Report Card initiative.