



Planetary Health Report Card (Medicine) 2026: *Case Western Reserve University School of Medicine*



2025-2026 Contributing Team:

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Land acknowledgment: In recognizing the land upon which we reside, we express our gratitude and appreciation to those who lived and worked here before us; those whose traditional homeland has been dispossessed to make our residence possible. Case Western Reserve University and the greater Cleveland area occupy land on the traditional homeland of the Lenape (Delaware), Shawnee, Wyandot Miami, Ottawa, Potawatomi, and other Great Lakes tribes (Chippewa, Kickapoo, Wea, Pinakahsw, and Kaskaskia). This land was officially ceded through the signing of the Treaty of Greenville in 1795.

Summary of Findings

Overall Grade	B-
Curriculum	B
<ul style="list-style-type: none"> The University Program in the CWRU School of Medicine extensively covers climate and health topics, especially during the first year of medical school. This includes team discussions, reading assignments, lectures, clinical skills simulation sessions, and exams. Recommendations: While some mitigation methods are covered, the curriculum can expand on ways to incorporate sustainability in hospital policies. In addition, the school may benefit from hiring a designated employee to brainstorm and create new planetary health content. 	
Interdisciplinary Research	B-
<ul style="list-style-type: none"> The CWRU SOM University Program has an abundance of research opportunities and mentorship through the Climate and Health Pathway, Climate and Health Education Collaborative, and Swetland Center for Environmental Health. Recommendations: Research opportunities may be easier to find with a comprehensive website of planetary health research in Cleveland. In addition, research and networking opportunities may increase with institutional membership in national and global organizations. 	
Community Outreach and Advocacy	C
<ul style="list-style-type: none"> The CWRU SOM has connections with multiple local organizations to promote sustainability, including the CWRU Climate and Health Education Collaborative. There is no formal communication about sustainability initiatives with students, however. Recommendations: Create more formal communication avenues to make students aware of sustainability activities with the School of Medicine and its affiliates. 	
Support for Student-Led Initiatives	B-
<ul style="list-style-type: none"> Students can advocate for more sustainable policies and connect with nature through the Med Students for Sustainability student group on campus and/or the Climate and Health Education Collaborative. Recommendations: In order to refine the planetary health curriculum, the school can create a department position for a student to integrate environmental health into the existing curriculum. 	
Campus Sustainability	C
<ul style="list-style-type: none"> The CWRU SOM continues to make progress towards becoming more sustainable, with built in programs for recycling, composting, and environmentally-friendly transportation. There is commitment to complete divestment from fossil fuels, with renewable energy sources growing each year. The university has committed to a Climate Action Plan, which sets a goal for carbon neutrality by 2050. Recommendations: Continue to work on retrofitting older buildings to meet sustainability standards, create requirements for sustainability standards at events, and continue to integrate renewable energy sources into medical school buildings, especially laboratories. 	

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.
- **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).

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 <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?	
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 point)	
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:	2
<p><i>Score explanation:</i> <i>The Climate and Health Pathway within the Pathways Program at Case Western Reserve University School of Medicine is a longitudinal four-year course that students can elect to take. This pathway includes monthly lectures with physicians who conduct planetary health research, organize projects to reduce waste within healthcare, or discuss health impacts of the climate crisis with patients. Students are also required to take an undergraduate course on planetary health and complete a capstone project. There are no additional pre-clerkship or clinical electives that cover environmental health. Pathways Programs CWRU SOM MD University Program</i></p>	

Curriculum: Health Effects of Climate Change

1.2. Does your <u>medical school</u> 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:	3
<p><i>Score explanation:</i> <i>Students at Case Western Reserve University are exposed to extreme heat effects on health multiple times throughout pre-clinical training. During Block 1 “Becoming a Doctor,” students learn about the impacts of rising temperatures on human health in the session “Team Based Learning - Climate Change” and the lecture “Occupational Health as a Social Determinant.” In addition, students engage in small group discussion sessions throughout the year with learning objectives that include: “Discuss how climate change can impact physical activity and its effect on human health” and “Explain how climate change, especially rising temperatures, affect the development of cardiovascular disease.”</i></p>	

1.3. Does your <u>medical school</u> 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:	2
<p><i>Score explanation:</i> <i>During Block 1 of medical school, “Becoming a Doctor”, students participate in “Team Based Learning - Climate Change.”. During this activity, they map out climate change in Northeast Ohio and health impacts on patients. This includes discussing extreme weather events, such as Hurricane Sandy and Katrina, and how they impact human health and access to healthcare.</i></p>	

1.4. Does your <u>medical school</u> 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
<p><i>Score explanation:</i></p>	

The lecture “Occupational Health as a Social Determinant” during Block 1 “Becoming a Doctor” briefly covered changing patterns of infectious diseases. This included the rise in vector-borne diseases due to rising temperatures.

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. (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:

During Block 1 “Becoming a Doctor” in the first year of medical school, students discuss neighborhoods with higher pediatric asthma rates. Later, in Block 4 “Homeostasis,” students discuss learning objectives covering climate effects on COPD during a case discussion, such as “List common environmental and genetic mechanisms causing chronic airflow obstruction. Explain how climate change effects further worsen COPD” and “How would you explain the effect of climate change on the patient’s COPD, and what advice would you give?”. This topic was also included in a pulmonary disease lecture.

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. (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:

During the “Homeostasis” block in the first year of medical school, students discuss cardiovascular diseases with learning objectives, namely “Does heat from climate change influence cardiovascular health?” and “Explain how climate change, especially rising temperatures, affect the development of cardiovascular disease.”

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. (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
<i>Score explanation:</i> <i>Students discuss the mental health impacts of environmental degradation and climate change, such as lack of greenspace, during the session “Team Based Learning - Climate Change” during Block 1 “Becoming a Doctor.”</i>	

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:	3
<i>Score explanation:</i> <i>The curriculum addresses food systems and nutrition equity in “Team Based Learning - Climate Change,” Block 3 “Food to Fuel” lecture, and in a Block 8 “Foundations of Clinical Medicine” seminar . Topics include how extreme weather events, such as droughts, impact water quality and food production and how soil fertility can impact nutrients in food.</i>	

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. (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
<i>Score explanation:</i> <i>Block 1 “Becoming a Doctor” includes “Team Based Learning - Climate Change,” a lecture titled “Occupational Health as a Social Determinant”, small group sessions, and a book discussion that address the outsized impact of climate change on marginalized populations, including a panel on the homeless population. The learning objectives in the small group session, in particular, asked</i>	

"Describe the impacts of changing climatic conditions on human health with emphasis on vulnerable populations."

1.10. Does your medical school curriculum address the unequal regional health impacts of climate change globally?

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 unequal regional health impacts of climate change globally are discussed in the discussion "Team Based Learning - Climate Change" and a Block 8 "Foundations of Clinical Medicine" seminar on global health. Topics covered include how climate change disproportionately impacts poorer nations and populations, though wealthier nations and individuals contribute the majority of greenhouse gas emissions.

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

1.11. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides, microplastics)?

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:

Block 1 "Becoming a Doctor" includes a small group session and reading materials on the role of industry-related environmental toxins, such as lead and endocrine disruptors, on the onset of menarche. One of the learning objectives was "Discuss the role of environmental exposures in early onset menarche and the risk factors associated with early onset menarche."

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)

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
<p><i>Score explanation:</i> The Block 1 “Becoming a Doctor” medical school curriculum includes a lecture titled “Environmental Influences on Health” and a session called “Team Based Learning - Climate Change” that cover local environmental threats. This includes a case discussion on the high rates of pediatric asthma in the Clark Fullerton neighborhood and the East Palestine, OH train derailment, where hazardous materials were released.</p>	

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?	
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
<p><i>Score explanation:</i> During “Team Based Learning - Climate Change” in Block 1 “Becoming a Doctor”, students briefly learn about how Indigenous populations view nature and how to restructure relationships with nature.</p>	

1.14. Does your <u>medical school</u> 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. (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
<p><i>Score explanation:</i> Block 1 “Becoming a Doctor” curriculum includes “Health Equity,” “Environmental Influences on Health,” and “Occupational Health as a Social Determinant” and a session named “Team Based Learning - Climate Change” on the harmful health effects of environmental toxins on vulnerable communities. Students also visited the Environmental Health Watch during Block 1 to learn about</p>	

the impact of climate change and environmental exposures, such as lead, on marginalized populations and how the organization strives to address these in Cleveland.

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. (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 point)

Score Assigned:

2

Score explanation:

The medical school curriculum briefly covers the environmental and health benefits of a plant-based diet during a team-based learning session on “Climate Change” and a lecture on nutritional quality in Block 3 “Food to Fuel.”

1.16. Does your medical school curriculum address the carbon footprint of 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:

2

Score explanation:

Students learn about the environmental impact of healthcare systems during the team-based learning discussion “Climate Change.”. This includes a reading assignment and a group discussion on the healthcare industry’s carbon footprint, scope emissions, and methods to reduce waste production and greenhouse gas emissions.

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)	0
The impact of anaesthetic 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 inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	0
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
<p><i>Score explanation:</i> <i>The CWRU School of Medicine curriculum addresses non-pharmaceutical management by mainly discussing health benefits but also by briefly touching upon environmental benefits through the session “Team Based Learning - Climate Change.”</i></p> <p><i>During Block 1 “Becoming a Doctor,” students learn about scope emissions within the healthcare system, including the impact of anesthetic gases in the “Climate Change” team based discussion.</i></p> <p><i>Students discuss the waste hospitals and clinics produce through a team-based learning session “Climate Change” in the first block of medical school.</i></p>	

Curriculum: Clinical Applications

1.18. In training for patient encounters, does your <u>medical school’s</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?	
Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum. (2 points)	
Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework. (1 point)	
No, there are not strategies introduced for having conversations with patients about climate change. (0 points)	
Score Assigned:	2
<p><i>Score explanation:</i> <i>The medical school curriculum introduces strategies to have conversations with patients about the health effects of climate change during Block 4 “Homeostasis” cases on COPD and during clinical</i></p>	

reasoning primary care simulations in Block 8 “Foundations of Clinical Medicine.” This session requires students to identify extreme heat exposures that exacerbate chronic diseases, educate the patient, and reflect on their interaction with the patient.

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

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

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

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

Score Assigned:

2

Score explanation:

Block 8 “Foundations of Clinical Medicine” is a longitudinal pre-clerkship course that medical students at CWRU engage in to develop history-taking and physical exams skills. Students learn how to take an environmental history and exposure history during communication workshops and continue practicing this skill with clinical reasoning standardized patient encounters and clinical skills exams.

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:

Faculty and students at the University Program and Lerner College Program at CWRU have advocated for expanding planetary health education in the medical school curriculum. The CWRU Climate and Health Education Collaborative has bolstered these efforts, and there are plans to incorporate planetary health more in the second and third years of medical school.

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:	6
<p><i>Score explanation:</i> <i>The medical school integrates planetary health into the curriculum throughout the first year of medical school through lectures, small group sessions, assignments, and interactions with standardized patients with a history of asthma or COPD. Students engage in discussions about these topics frequently and learn ways to incorporate these topics in discussions with patients.</i></p>	

1.22. Does your <u>medical school</u> employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?	
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:	0
<p><i>Score explanation:</i> <i>There are multiple faculty members working to integrate planetary health topics into the medical school curriculum. However, there is no dedicated faculty member employed for this role, and all current efforts to update the curriculum are done by employees hired in other roles.</i></p>	

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)	
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:	1
<p><i>New metric for 2025/26 PHRC. This metric highlights the role of healthcare professionals as advocates for their patients beyond just clinical care. As trusted voices, health professionals have significant influence on policy and public perceptions of the environmental and social determinants of health. Public policy profoundly impacts our health across areas of housing, food, access to</i></p>	

healthcare and indirectly through climate and environmental policies. In many healthcare systems internationally advocacy by healthcare professionals is increasingly viewed as an ethical imperative and professional duty.

To learn more about this topic and the importance for healthcare professionals please review the following resources:

- [Why and How Civic Health Should Be Incorporated Into Medical Education](#). Barrere-Cain et al., 2022. *Academic Medicine*.
- [Civic Engagement: A Vital Sign of Health and Democracy](#). Philip M. Alerbti. AAMC.

For practical guidance on incorporating this into your health professional curriculum:

- CRHE Module: [Interaction between health care systems, government policy, and environmental advocacy](#).
- Medical Schools Council (UK), [Education for Sustainable Healthcare, A curriculum for the UK](#). Page 21. Professionalism, leadership and achieving structural change.

Score explanation:

The first block of medical school, “Becoming a Doctor,” covered social determinants of health, including environmental health, in depth through lectures, small group sessions, team-based learning discussions, assignments, exams, and site visits of local organizations involved in advocacy. However, there was no discussion on how students themselves can become involved in civic engagement/advocacy to address environmental and structural determinants of health.

There is a supplemental “Advocacy and Public Health Pathway” outside of the traditional curriculum. In this pathway, students participate in electives such as “Physician as an Advocate” (MEDS 9014M) where they work on skill-building workshops with community advocacy organizations, like the Social Justice Institute. The goal of this pathway is to prepare students to be involved in advocacy throughout their careers.

Section Total (54 out of 75)

72%

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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 <u>institution</u>?	
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
<p><i>Score explanation:</i> <i>The CWRU Climate Action Network is a collaborative group of students and faculty involved in sustainability on campus. This group includes a research leadership team. CWRU Climate Action Network</i></p> <p><i>Additionally, the Center for Global Health and Diseases within the School of Medicine Department of Pathology studies tropical disease epidemiology and spatial patterns. The Center for Global Health and Diseases</i></p> <p><i>At the Swetland Center for Environmental Health, food systems and environmental exposures are currently being studied. Our Research Swetland Center for Environmental Health</i></p> <p><i>The Sustainability in Surgery group at the Cleveland Clinic consists of faculty, residents, and students interested in studying and reducing the environmental impact of the healthcare industry. Research projects include a life cycle assessment studying the use of reusable and disposable linens in operating rooms. Does reusable mean green? Comparison of the environmental impact of reusable operating room bed covers and life sheets versus single-use</i></p>	

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution?

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 point)

There is **no** dedicated department or institute. (0 points)

Score Assigned:

3

Score explanation:

The Swetland Center for Environmental Health at Case Western Reserve University aims to advance understanding of planetary health through research on environmental determinants of health. [Our Research | Swetland Center for Environmental Health](#)

The CWRU Climate Action Network unites students and faculty interested in sustainability. This group includes a research team. [CWRU Climate Action Network](#)

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 point)

There is **no** process, and **no** efforts to create such a process. (0 points)

Score Assigned:

2

Score explanation:

The Swetland Center for Environmental Health provides a form for questions or requests related to research. [Contact Us | Swetland Center for Environmental Health](#)

In addition, the center has assisted in developing a Neighborhood Level Community Health Needs Assessment to observe and address health trends related to environmental factors in the community. [Neighborhood Community Health Needsd Assessmentns | Swetland Center for Environmental Health](#)

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:

1

Score explanation:

The CWRU Office of Sustainability website includes a link to a list of faculty involved in sustainability research. It also provides information about the Summer Undergraduate Research in Energy and Sustainability, a 10-week summer research opportunity for undergraduates interested in research in sustainability. [Research | Office of Energy and Sustainability](#)

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

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

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

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

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

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

Score Assigned:

2

Score explanation:

The CWRU Climate and Health Education Collaborative hosted the Climate and Health Education Summit in March 2024 to educate and share opportunities of integrating climate health into medical curriculum. The summit included panel discussions and poster sessions discussing the relationship between climate and health and methods to increase awareness of this multifaceted relationship in academic curriculum. [CWRU Climate and Health Education Summit](#)

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 point)

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

Score Assigned:

0

Score explanation:

Case Western Reserve University is not currently a member of a national or international planetary health or ESH/ESV organization.

Section Total (11 out of 17)

65%

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Community Outreach and Advocacy

Section Overview: This section evaluates a school's 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 <u>institution</u> 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 participates in community focused events relating to planetary health. (1 point)	
No, there is no such meaningful community partnership. (0 points)	
Score Assigned:	3
<p><i>Score explanation: CWRU School of Medicine participates in “The Case Western Reserve University Climate and Health Education Collaborative of Northeast Ohio”. This is a partnership between Cleveland Clinic, MetroHealth, University Hospitals, and Case Western Reserve University. The goal is to create and share educational programs about climate change and health in the community. There are many community partnerships that have been established through this collaborative. Recent collaboration between the collaborative and the Western Reserve Land Conservancy has also increased. Various events and talks are hosted with the Climate Collaborative on the medical campus.</i></p>	

3.2. Does your <u>institution</u> 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 has not offered such community-facing courses or events. (0 points)	
Score Assigned:	3
<i>Score explanation: The CWRU Climate and Health Education Collaborative (named in section 3.1) hosts and engages in many activities with the community. For example, the Collaborative has participated in and promoted tree planting events with the Western Reserve Land Conservancy. Outside of the Collaborative, the CWRU School of Medicine does not offer any events or courses otherwise directed at the public.</i>	

3.3. Does your <u>institution</u> 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:	0
<i>Score explanation: CWRU has a daily electronic newsletter issued to the entire university community, including graduate students. The medical school, more specifically, has a monthly newsletter to share medical education updates. Neither of these communication platforms share regular updates dedicated to either planetary health or sustainable healthcare.</i>	

3.4. Does the <u>institution</u> or <u>main affiliated hospital trust</u> engage in professional education activities targeting individuals post-graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?	
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 providers. (1 point)	
There are no such accessible courses for post-graduate providers. (0 points)	
Score Assigned:	0
<i>Score explanation: There are no courses currently available for post-graduate providers related to planetary health and/or sustainable healthcare. Continuing medical education courses (CME) offered through CWRU School of Medicine do not include topics related to climate or environmental health. Information about CME at CWRU can be reviewed further here.</i>	

There is an on-demand curriculum in development for Graduate Medical Education at Cleveland Clinic Foundation. The course will address post-infectious illnesses through a climate and health lens. This project has not yet been completed, with plans to be completed in the next year.

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

Yes, the **institution** 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: 0

Score explanation: Cleveland Clinic, University Hospitals, MetroHealth, and the Cleveland VA Medical Center do not have a readily-available set of educational materials dedicated to education on environmental health exposures.

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 **institution** 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 hospitals have accessible educational materials for patients. (0 points)

Score Assigned: 1

Score explanation: Cleveland Clinic does not have a dedicated set of educational materials regarding the health impacts of climate change. They do have a published episode of “Respiratory Infections” where multiple physicians from the Cleveland Clinic Respiratory Institute discuss the effect of climate change on respiratory health. The transcript of the podcast can be reviewed [here](#).

University Hospitals does not have a dedicated set of educational materials regarding the health impacts of climate change. They have published a podcast episode titled “Exploring the Effects of Policy and Environmental Factors on Health Outcomes”, where experts discuss the connection between climate change and poor health outcomes, particularly cardiovascular outcomes. The transcript of the podcast can be viewed [here](#).

MetroHealth and the Cleveland VA Medical Center do not have any dedicated set of educational materials regarding the health impacts of climate change.

Section Total (7 out of 14)	50%
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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 <u>institution</u> offer support for students interested in enacting a sustainability initiative/QI project?	
Yes, the institution <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 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, the institution does not offer opportunities or support for sustainability initiatives or QI projects. (0 points)	
Score Assigned:	2
<p><i>Score explanation:</i> <i>The Daniel Lewis Ravin, MD Award from the Swetland Center for Environmental Health at CWRU honors up to three graduate students interested in occupational or environmental health each year. The award includes \$10,000 for stipend and project execution costs. Students who receive this award also receive mentorship support from the Swetland Center. Daniel Lewis Ravin, MD Award Swetland Center</i></p>	

4.2. Does your <u>institution</u> 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 them 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:	1
<p><i>Score explanation:</i> <i>CWRU requires all MD students to conduct 12 weeks of research for their MD Thesis. However, this project is of the student's choosing and is not required to be related to planetary health. The</i></p>	

Climate and Health Pathway offers mentorship and advising to assist in finding research opportunities, but this requires student initiative as well.

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 institution, 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:

1

Score explanation:

The CWRU Office of Energy and Sustainability webpage includes a list of faculty mentors working on planetary health research projects. However, apart from the departments these faculty members work at, there is no additional contact information or description of ongoing research. [Faculty Research | Office of Energy and Sustainability](#)

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 institution dedicated to planetary health or sustainability in healthcare. (2 points)

Yes, there is a student organisation at my institution 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:

Students can engage in planetary health research and advocacy through the Climate and Health Pathway at the medical school. This is a longitudinal four-year pathway, where students attend monthly discussions, participate in climate and health-related courses, and organize projects. The pathway also includes mentorship for research opportunities, conference attendance, and advocacy. [Climate and Health | Pathways Program](#)

The medical school also has the Med Students for Sustainability student group. This group is supported by a faculty advisor and university funding. Student leaders of this group organize hikes, trips to assist at the University Farm, box drives, and help assemble reused dissection kits for anatomy lab. [Student Groups | CWRU SOM](#)

Students can also participate in the CWRU Climate and Health Education Collaborative, a network of healthcare professionals and community organizations dedicated to advancing planetary health in Cleveland. [CWRU Climate and Health Education Collaborative](#)

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 who serves on a department or institutional decision-making council/committee. (1 point)

No, there is no such student representative. (0 points)

Score Assigned:

0

Score explanation:

Although The Office of Energy and Sustainability has student Sustainability Ambassadors who help organize events on campus, there is no official student liaison who serves on a department or institutional decision-making council.

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.

0

Cultural arts events, installations or performances related to planetary health that have students as an intended audience.

0

Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.

0

Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)

1

Score explanation:

The Sweetland Center for Environmental Health has multiple research projects and community engagement activities centered around food systems and nutrition equity. [Sweetland Center](#) Additionally, the CWRU University Farm strives to serve as an opportunity for research, education, community engagement, and recreation for students and faculty. [CWRU University Farm](#)

The Office of Energy and Sustainability hosted discussions on planetary health during its Climate Action Week in October 2025. This series included networking; reflection and brainstorming sessions; and talks on sustainable innovation, historical environmental racism, and planetary justice from an anthropologic and psychological lens. [Calendar | Office of Energy and Sustainability](#)

The Med Students for Sustainability student group at CWRU School of Medicine organizes hikes and trips to the University Farm to reconnect with nature. [Student Groups | CWRU SOM](#)

Section Total (9 out of 15)

60%

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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 institutions, 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 <u>institution</u> 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:	2
<i>Score explanation: CWRU has an Office of Energy and Sustainability (OES) with multiple full-time staff members, that works towards improving the sustainability state of the entire university, including graduate and undergraduate programs. A few of the main focuses of the office include: Climate Action Plan, energy data reporting, and campus engagement in sustainability initiatives. There is no specific role dedicated to the medical school or hospital sustainability. Students can become directly involved with the office as "Sustainability Ambassadors".</i>	

5.2. How ambitious is your <u>institution's</u> 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 does not meet any of the requirements listed above (0 points)	
Score Assigned:	0

Score explanation: The first Climate Action Plan at CWRU was published in 2011. The [2020 update to the CWRU Climate Action Plan](#) pledges carbon neutrality by the year 2050, with plans for 50% reduced emissions by 2030 and 70% reduced emissions by 2040. The plan is updated ~5 years, but there is no new update made visible to the public yet for 2025. The published plan can be found [here](#).

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:

0

Score explanation: CWRU uses a few renewable energy systems for campus buildings including a wind turbine (2010) and solar panels (2011 and 2014). CWRU buys its electricity from The Medical Center Company (MCCo), which procures electricity from Cleveland Public Power and utilizes a 1-Megawatt solar field on Euclid Avenue on the border of the city. The renewable energy sources utilized by on-site and off-site providers produce <20% of energy needs, however. More information about energy on campus can be found [here](#).

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:

2

Score explanation: The entire university is committed to LEED (Leadership in Energy and Environmental Design) standards. LEED certified buildings use less energy and send less waste out into landfills during their construction. More about LEED certification can be found [here](#).

Multiple campus buildings have reached LEED Silver and Gold status. The Health Education Campus, a building dedicated to the health professions graduate programs including the School of Medicine, is LEED Gold certified. The [ISEB](#) (interdisciplinary science and engineering building) is under renovation and is following LEED standards. Older buildings are not always retrofitted to meet LEED standards.

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: Case Western Reserve University encourages safe and sustainable transportation for students through multiple options. Gohio carpooling portal, discounts on Cleveland Regional Transit Authority (RTA), and campus [shuttles](#) are a few examples. There are also >150 bike racks across campus, adjacent to many campus buildings. In the past 3 years, bike racks were added near the Health Education Campus too as a result of student initiatives. More information on sustainable transportation options at CWRU can be found [here](#).

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 institution. (0 points)

Score Assigned:

3

Score explanation: CWRU School of Medicine has multiple waste bins for trash and [recycling](#). There is a robust recycling program in a majority of other campus buildings too, with recent initiatives from the Office of Energy and Sustainability to update signage and bins for better clarity.

Food waste is also picked up from dining halls for composting through the Rust Belt Riders. In 2025, 120.43 tons of organic material was composted from the partnership between CWRU and Rust Belt Riders. Some of the compost is taken directly to the [University Farm](#), where it is used to grow food used in the dining halls. There is no composting at the Health Education Campus, although discussion of its introduction has occurred recently.

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: CWRU has a contract with Bon Appetit Management Company for a majority of campus food. Bon Appetit has a corporate policy requiring [20% of their food and beverage purchases to be compliant with a “Farm to Fork” program](#), meaning that the food is grown and processed within 150 miles of the location it is served.

The University Farm is another source of produce for the university. Bon Appetit purchases food from the University Farm for dining halls and catering on campus.

Overall, the university utilizes partnerships that have sustainable procurement guidelines. There is no official set of guidelines that are required, however.

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:	0
<i>Score explanation: CWRU does not have any published sustainability guidelines for supply procurement. Although not required, there is involvement in sustainable supply procurement, which can be seen here. A few examples include purchasing green building construction products, using green cleaning products (Green Seal Certified), and encouraging purchases of recycled paper.</i>	

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
<i>Score explanation: Sustainability is encouraged at the university events, but is not required. Bon Appetit and Rust Belt Riders work with the university to host sustainable and zero-waste events throughout the year. Not every event has the same sustainability focus, however, as there is no required sustainability criteria for events.</i>	

5.10. Does your <u>institution</u> 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
<i>Score explanation: CWRU has more than 1,300 labs on campus which are responsible for a large amount of energy use and waste production. As a part of the Climate Action Plan, the Office of Energy and Sustainability started the "Green Labs Program" which helps labs reduce energy and waste. Participation in the program is voluntary for labs on campus, but is helpful in providing practical steps for change.</i>	
<i>CWRU also started a program to upgrade the ultra-low temperature freezers, often used in lab</i>	

settings. Older freezers use up to 50% more electricity. The program provides an incentive of funding to primary investigators to secure a new freezer. See details about the program [here](#).

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: CWRU has expressed commitment to completely divest the university endowment of fossil-fuel related investments. The university has not made new fossil fuel investment since 2017 and will not make any future investment in fossil fuel companies. Still, there are current investments in fossil-fuel companies from long-term previous agreements.

Section Total (16 out of 32)

50%

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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 Case Western Reserve University School of Medicine.

The following table presents the individual section grades and overall institutional grade for the Case Western Reserve University School of Medicine on this Planetary Health Report Card.

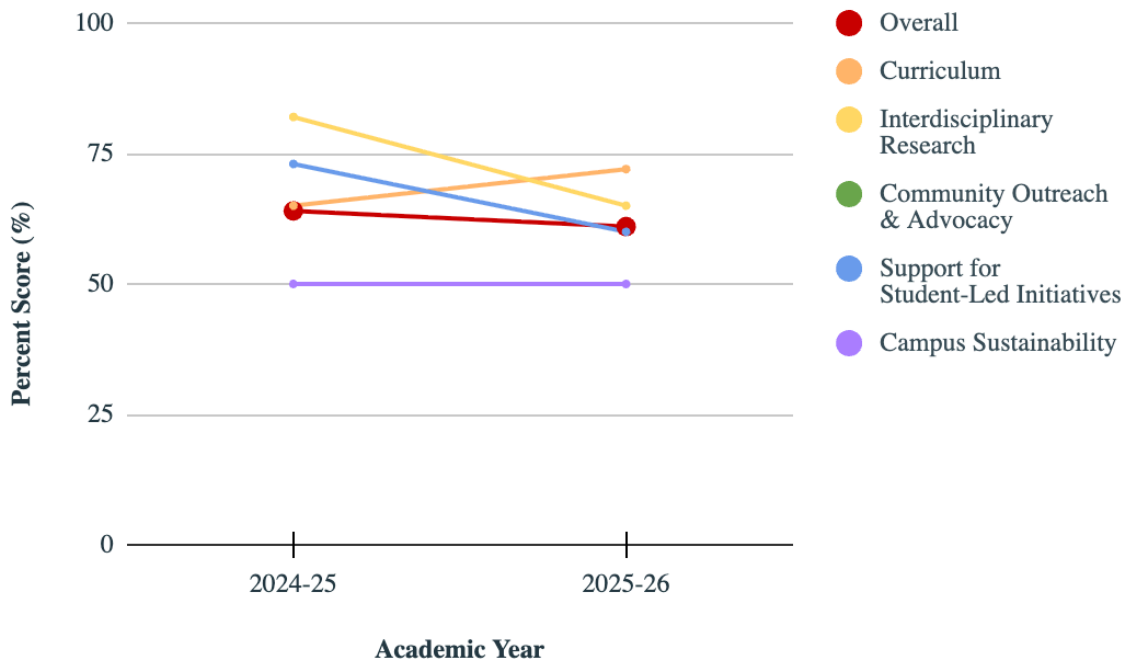
Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(54/75) \times 100 = 72\%$	B
Interdisciplinary Research (17.5%)	$(11/17) \times 100 = 65\%$	B-
Community Outreach and Advocacy (17.5%)	$(7/14) \times 100 = 50\%$	C
Support for Student-led Planetary Health Initiatives (17.5%)	$(9/15) \times 100 = 60\%$	B-
Campus Sustainability (17.5%)	$(16/32) \times 100 = 50\%$	C
Institutional Grade	$(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 60.98\%$	B-

Report Card Trends

Section Overview

This graph demonstrates trends in overall and section grades for the years in which Case Western Reserve University School of Medicine has participated in the Planetary Health Report Card initiative.

Planetary Health Report Card Trends for Case Western Reserve University School of Medicine



*Green line for Community Outreach & Advocacy falls directly under purple line for Campus Sustainability