

# Planetary Health Report Card (Medicine):

## The University of Colorado School of Medicine



University of Colorado Anschutz Medical Campus

#### 2024-2025 Contributing Team:

- Students: Monisha Lensink-Vasan\*, Caroline Walsh, Alessandra Santiago, Douglas Fritz, Armaan Dhillon, Em Shelby
- Faculty Mentors: Dr. Beth Gillespie

Land acknowledgment: We humbly acknowledge that University of Colorado – Anschutz Medical Campus is located on the traditional and contemporary homelands of Indigenous peoples. Our campus resides on unceded lands of the Arapaho people, established to the Treaty of Fort Laramie in 1851. We recognize the enduring presence of more than 40,000 Indigenous peoples in the greater Denver area. The sprawling urban American Indian and Alaska Native presence in Denver consists of other tribes native to Colorado such as Apache, Comanche, Shoshone, and Ute community members yet is now home to numerous other Indigenous people from many of the 560 plus federally recognized tribes in this country.

<sup>\*</sup>Primary Contact: Monisha Lensink-Vasan, monisha.lensink-vasan@ucdenver.edu

Together, we acknowledge the history of genocide and ongoing systemic inequities while respecting treaties made on this territory as a step towards reconciliation and strengthening relationships with Indigenous peoples. We give thanks to the past, present and future stewards of this land and respect all tribal nations' sovereignty and right to self-determination. We recognize the lessons, including many medical and public health lessons Indigenous communities have offered and continue to teach us.

#### **Summary of Findings**

Overall Grade B+

#### Curriculum B

- Planetary health impacts, clinical skills, and patient cases are discussed in lectures, small group sessions, and team-based learning throughout the medical school curriculum at CU. Elective coursework and enrollment at the Fort Collins branch campus offers students deeper dives into planetary health.
- Recommendations: There is a group of students called CHIP (Climate Health Integration Project) that have been working with the deans and faculty to integrate planetary health and environmental exposure into the curriculum, and are currently working to reach their goal of 25% of cases having some discussion of environmental exposure. Reaching this goal would allow for the school to gain many more points on future report cards, as these cases represent a way to incorporate many different topics within planetary health across multiple years of the curriculum.

#### **Interdisciplinary Research**

A

- Colorado University School of Medicine (CUSOM) has faculty devoted to interdisciplinary research in the field. The CUSOM Climate and Health Program is dedicated to medical and graduate student education and research into planetary health and the institution has organised events/conferences focused on this area in the past.
- **Recommendations**: CUSOM could reach out to communities most affected by climate change to gather their input on how best to utilize our resources. CUSOM should continue to be aggressive in fostering a reputation as leaders in planetary health research.

#### **Community Outreach and Advocacy**

A

- In 2024, the University of Colorado School of Medicine increased the frequency of its internal and external communications about planetary health and the health impacts of climate change following the hiring of multiple full-time employees at the Office of Sustainability and Office of Accessibility and Engagement. New public-facing website pages and events at CU and UCHealth further elevate the scores in this section from 2023. Finally, the Service Learning curriculum underwent reform in 2023-2024 with reinstatement of mandatory student engagement with community organizations planned for 2025; CU has maintained its partnerships with community-based organizations throughout the reform period.
- **Recommendations**: Across each of the institution's affiliated hospital systems, we recommend establishing a central repository for patient-facing information and educational materials about planetary health. Many but not all of the affiliated systems offer planetary health materials that are easy to find on their websites, and we recommend that all affiliated hospitals produce materials catering to the populations that each system serves.

#### **Support for Student-Led Initiatives**

R

- CUSOM supports multiple student groups related to planetary health, has a branch campus built upon One Health, and hosts many events each year around sustainability. There are also two students from every medical school class that are elected and serve as sustainability representatives on the Medical Student Council
- **Recommendations**: While CUSOM has many ways for students to get involved in initiatives around sustainability and planetary health, the website does not do a great job of advertising these, as it has not updated the medical student section since 2022, nor has it updated the events being put on by the Climate

and Health Program since a similar time. Keeping the website updated with events, curricular changes, and volunteering opportunities would be a great way to support students interested in engaging with planetary health during their time at CUSOM.

#### **Campus Sustainability**

**C**+

- The University of Colorado School of Medicine has made good progress to become a more sustainable campus in conjunction with the wider University, including forming a sustainability work group that has developed an energy master plan and climate action plan, hiring three new employees devoted to sustainability projects (green labs program, waste diversion, transportation, etc.), and significant investment in improving building efficiency and energy savings initiatives.
- **Recommendations**: There is still room for improvement with campus sustainability. The climate action plan and energy master plan in development should both help facilitate continued improvement. We look forward to continued improvement in the green lab initiative and energy efficiency efforts. We also recommend campus-wide improvement of sustainable guidelines for events and procurement and increased funding for renewable energy.

#### **Statement of Purpose**

Planetary health is human health.

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

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

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

#### **Definitions & Other Considerations**

#### **Definitions:**

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

specifically targeted for medical students, can meet this metric.

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

#### Other considerations:

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

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

#### Planetary Health Curriculum

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

Curriculum: General

### 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 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:

Score explanation: At the University of Colorado, IDPT 8075 "Climate Change and Environment" is a 4 week course offered to third and fourth year medical students. Topics discussed include: foundations of climate science, air quality, heat related illness, extreme weather, mental health, water security, and food security, as well as healthcare sustainability. Curriculum includes didactics from local and guest speakers, several case based learning sessions, advocacy discussions, and an assigned op-ed. The course also includes interdisciplinary workshops (with pharmacy students and a community group) on home-made air purifier DIY with focus on local environmental justice concerns. This course is modified from a 2 week course previously offered to fourth year students.

During third and fourth year, there is another course, IDPT 8103 "Environmental Health for Future Physicians" that can be 2-12 weeks in duration, and aims to bridge the gaps between public health and medicine, by teaching students about environmental health risks and how contaminants can impact patient health.

Additional curricular direction and content delivery at the Fort Collins branch of CUSOM is led by One Health faculty from the School of Veterinary Medicine, environmental and occupational hazard researchers, and other interdisciplinary faculty. There is also a "One Healthy City Practicum" elective course offered across all four years to students in the Fort Collins branch. This course includes a 12-session interprofessional didactic series where students work with other

graduate departments at CSU and the city of Fort Collins to develop "healthy living" public planning initiatives.

The University of Colorado School of Medicine (CUSOM) offers several educational track options that students can enroll in to supplement their education in an area they are interested in. The Global Health track focuses on issues that are affecting developing countries and ways in which future providers can help. There are several lectures that are required for this track, including: IDPT 5200 Introduction to Global Health, IDPT 5012 Introduction to Global Health Research, and IDPT 8018 Global Health and Disaster. These courses introduce students to the impacts of Planetary Health and its effects on different populations throughout the world along with the applications of sustainable development on global healthcare initiatives. There is emphasis on the effects of planetary health on the most vulnerable of populations.

#### Curriculum: Health Effects of Climate Change

1.2. Does your <u>medical school</u> curriculum addr health risks, and climate change?	ess the relationship between extreme heat,
This topic was explored in depth by the core curr	iculum. (3 points)
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	2

Score explanation: During the didactic courses in first year, students have a required lecture on environment and lung disease, as well as a small group session on environmental health and climate change. Topics discussed in the lecture included: defining terms such as planetary and one health, identifying health effects of climate change (heat related illness, cardiovascular failure, injuries, mental health, asthma, vector borne-illnesses, civil conflict, malnutrition, infection, allergies, etc.), health conditions increasing the risk of heat-related injury, the role of the healthcare system on climate change, and how to take an environmental health history. The small group session was devoted specifically to reviewing clinical cases, practicing environmental health histories, and discussing strategies to reduce climate related health risks.

During the third year advanced science courses, students received a lecture on frailty and aging. The lecturer discussed heat waves and their increasing frequency and how they disproportionately affect elderly populations.

Heat-related illness is also covered in electives available to third and fourth year students, including IDPT 8075 "Climate Change and Environment." This is a 4 week course offered to third and fourth year medical students, with topics including: foundations of climate science, air quality, heat related illness, extreme weather, mental health, water security, and food security, as well as healthcare sustainability.

## $1.3.\ Does\ your\ \underline{medical\ school}\ curriculum\ address\ the\ impacts\ of\ extreme\ weather\ events\ on\ individual\ health\ and/or\ on\ health care\ systems?$

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: First year students have a required lecture on environment and lung disease, which included discussion of the impacts of increased heat, wildfire smoke, and aeroallergens on air quality. Later, during the pulmonary and cardiovascular block, there was a hosted 'Vista' session where the Endowed Chair in Climate Medicine lectured on the impact planetary health will likely have on the future of medicine which mentions extreme weather events.

During the third year advanced science courses, students received a lecture on frailty and aging. The lecturer discussed heat waves, their increasing frequency and how they disproportionately affect elderly populations.

## 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

Score explanation: There is a lecture during the pre-clinical infectious disease block that discusses changing patterns of infectious diseases in depth. Later, during the pulmonary and cardiovascular block, there was a hosted 'Vista' session where the Endowed Chair in Climate Medicine lectured on the impact planetary health will likely have on the future of medicine which briefly mentions infectious disease.

The topic of changing patterns of infectious diseases is covered in depth in the elective IDPT 8075 "Climate Change and Environment" which is available to third and fourth year medical students.

## 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)

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: In the new Trek curriculum, during the first year gastrointestinal block students first are presented with a small group session on the impacts of climate change on human health in different communities and populations. Topics discussed included: defining terms such as planetary and one health, identifying health effects of climate change (heat related illness, cardiovascular failure, injuries, mental health, asthma, vector borne-illnesses, civil conflict, malnutrition, infection, allergies, etc.), health conditions increasing the risk of heat-related injury, the role of the healthcare system on climate change, and how to take an environmental health history. During the pulmonary and cardiovascular block, an hour-long lecture was dedicated to "Environment and Lung Disease." Students learned about the health effects of air pollution related to wildfires, particulate matter, ozone, and other relevant air pollutants. The Air Quality Index and AirNow resources were shared and explained with students. The immunologic response to air pollution and exposure-related asthma was also explored in addition to pneumoconiosis. Later, during the pulmonary and cardiovascular block, there was a hosted 'Vista' session where the Endowed Chair in Climate Medicine lectured on the impact planetary health will likely have on the future of medicine which mentions respiratory health and air pollution.

First year students also work with standardized patients to practice patient interactions before clinical years. These standardized patient histories have been updated to include environmental exposures. One such patient encounter is of a patient with known COPD who experiences an exacerbation related to wildfire/pollutant exposure.

In the clinical year, there is a half day team based learning session focused on planetary health. The session includes a case of a child with dyspnea which is ultimately diagnosed as asthma with environmental triggers. The learning objective for the session was, "demonstrate taking an environmental health patient history."

### 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)

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

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

2

Score explanation: In the new Trek curriculum, during the first year pulmonary and cardiovascular block, students are presented with a lecture on the impacts of climate change. There was one provided graphic that included "heat-related illness and death, and cardiovascular failure." The topic was briefly emphasized during the session. Later in the same block, there was a hosted 'Vista' session where the Endowed Chair in Climate Medicine lectured on the impact planetary health will likely have on the future of medicine which briefly mentions cardiovascular health.

### 1.7. Does your <u>medical school</u> 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

Score explanation: Score explanation: This topic was briefly discussed in the new Trek curriculum during the first year pulmonary and cardiovascular block. Students were presented with a lecture on the impacts of climate change on human health in different communities and populations. There was one provided graphic that included "mental health impacts." However, the topic was not specifically emphasized during the session. Opportunities exist to integrate such topics across other organ system blocks, and in preparing students to have conversations regarding the health effects of climate change during weekly clinical skills sessions. Also in the first year curriculum, there was a hosted 'Vista' session where the Endowed Chair in Climate Medicine lectured on the impact planetary health will likely have on the future of medicine which briefly mentions mental illness and trauma.

This topic was briefly interwoven throughout the IDPT 8075 "Climate Change and Environment" elective available to third and fourth year medical students.

## 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)

2

Score explanation: In the Trek curriculum, during the first year gastrointestinal block students are presented with a lecture on the impacts of climate change on human health in different communities and populations. The topic is briefly discussed and included in a shared graphic. Later, during the pulmonary and cardiovascular block, there was a hosted 'Vista' session where the Endowed Chair in Climate Medicine lectured on the impact planetary health will likely have on the future of medicine which mentions water security and food insecurity.

First year medical students were also able to enroll in a Nutrition elective in which a few lectures were focused on sustainability and the agriculture industry. One of the major topics of a lecture was water security, access to food, and the effects of climate change on this ecosystem.

This topic is also covered in depth during the IDPT 8075 "Climate Change and Environment" elective available to third and fourth year medical students.

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

Score explanation: This topic is covered during a small group session for first year students on environmental health and climate change. Within this session, increased susceptibility for children, pregnant people, and older adults is discussed, as is increased exposure for communities of color, those with low SES or housing instability, and those with occupational exposures.

During the third year advanced science courses, students received a lecture on frailty and aging. The lecturer discussed heat waves, their increasing frequency and how they disproportionately affect elderly populations.

## 1.10. Does your <u>medical school</u> 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)

2

Score explanation: During the pulmonary and cardiovascular block for first year students, there was a hosted 'Vista' session where the Endowed Chair in Climate Medicine lectured on the impact planetary health will likely have on the future of medicine which briefly mentions regional health impacts globally, nationally, and locally.

During the third year advanced science courses, students received a lecture that had a few slides devoted to access to food with extreme climate events and a changing climate. The lecturer touched on the sustainable development goals and discussed climate change in the context of nutrition. There was a brief connection to the global context.

This topic was covered in depth during the IDPT 8075 "Climate Change and Environment" elective available to third and fourth year medical students. It is also discussed in the Global Health Track.

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

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

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 first year gastrointestinal block there was a lecture on the effects of climate change on health. There was brief discussion on the impact of air pollution on fetal/infant mortality, preterm birth and low birth weight.

This topic is covered in the lecture "Women's Health and Climate Change" during the IDPT 8075 "Climate Change and Environment" elective available to third and fourth year medical students.

## 1.12. Does your <u>medical school</u> 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)

Score explanation: Human-caused environmental threats in the Denver/Aurora community were discussed during a small group session for first year students during the gastrointestinal block. First year students also complete a "windshield" survey during their orientation week. This survey required groups of students to visit different communities surrounding the university and also research social determinants of health in their assigned area. These findings were then presented to the cohort.

During the pulmonary and cardiovascular block in first year, an hour lecture was dedicated to "Environment and Lung Disease." Students learned about the health effects of air pollution related to wildfires (something close to home in Colorado).

This topic is discussed during several lectures in IDPT 8075 "Climate Change and Environment" an elective course. A local community group will guide students through a polluted neighborhood in North Denver to highlight environmental injustices facing the community. Through the same organization, students will pair with community members to construct homemade fan filters that will be donated to provide "clean indoor spaces". Discussion will be guided to elicit community air pollution concerns and brainstorm prevention strategies. community air pollution.

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)

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

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

Score Assigned:

Score explanation: In the new Trek curriculum, during the first year gastrointestinal block students are presented with a small group session on the impacts of climate change on human health in different communities and populations. This session includes a learning objective about recognizing the importance of indigenous knowledge in environmental health, which is a topic of discussion during the small group session.

3

This topic is also discussed during several lectures in IDPT 8075 "Climate Change and Environment," including a lecture titled "Climate Change and Indigenous Health."

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 <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3

Score explanation: In the new Trek curriculum, during the first year gastrointestinal block students are presented with a small group session on the impacts of climate change on human health in different communities and populations. This session includes discussion of the increased susceptibility for children, pregnant people, and older adults, as well as the increased exposure for communities of color, those with low SES or housing instability, and those with occupational exposures.

During the third year advanced science courses, students received a lecture on frailty and aging. The lecturer discussed heat waves, their increasing frequency and how they disproportionately affect elderly populations.

#### Curriculum: Sustainability

-	
1.15. Does your <u>medical school</u> curriculum add of a plant-based diet?	dress the environmental and health co-benefits
This topic was explored in depth by the core cur	riculum. (3 points)
This topic was <b>briefly</b> covered in the <b>core</b> curricu	ulum. (2 points)
This topic was covered in <b>elective</b> coursework. (1	l point)
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	1
Score explanation: During first year, there is an o	

Score explanation: During first year, there is an optional nutrition elective for students that includes discussion of climate conscious nutrition. This topic is also covered in IDPT 8075 "Climate Change and Environment" an elective course available to third and fourth year students.

## 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. (3 points)

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

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

Score explanation: During the first year gastrointestinal block students are presented with a small group session on the impacts of climate change on human health in different communities and populations. This session includes discussion of the impact of the US healthcare system on the climate crisis, with two included graphics, and small group discussion questions on the topic. Later, during the pulmonary and cardiovascular block, there was a hosted 'Vista' session where the Endowed Chair in Climate Medicine lectured on the impact planetary health will likely have on the future of medicine which briefly mentions the carbon footprint of the healthcare system.

3

This topic is also covered throughout the third and fourth year elective IDPT 8075 "Climate Change and Environment."

1.17. Does your <u>medical school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each)	Score
The health <b>and</b> environmental <b>co-benefits</b> of <b>avoiding</b> over-medicalisation, over-investigation and/or over-treatment (2 points)	0
The environmental impact of <b>pharmaceuticals</b> and over-prescribing as a cause of climate health harm. Alternatively teaching on <b>deprescribing</b> where possible and its environmental and health co-benefits would fulfil this metric. (2 points).	0
The health <b>and</b> environmental <b>co-benefits</b> of <b>non-pharmaceutical management</b> of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK. (1 point)	0
Environmental impact of <b>surgical</b> healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	0
The impact of <b>anaesthetic</b> gases on the healthcare carbon footprint and ways to reduce anaestheisa's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	0
The impact of <b>inhalers</b> on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	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: In the gastrointestinal block of the first year, students learn about the benefits of deprescribing to minimize carbon footprint and polypharmacy, as well as the carbon footprint of anesthetic gases and inhalers. This is done in a small group session for all first years, which includes the question of how the environmental impact of delivering healthcare can be mitigated is a point of discussion during the small group session.

Waste production in the healthcare system is further discussed during a lecture on "Environment and Lung Disease" and during a hosted 'Vista' session where the Endowed Chair in Climate Medicine lectured on the impact planetary health will likely have on the future of medicine. This

lecture briefly mentions waste production in the healthcare system and mitigation strategies to improve hospital sustainability.

#### 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 points)

No, there are **no** strategies introduced for having conversations with patients about climate change. (0 points)

1

Score Assigned:

Score explanation: In the new Trek curriculum, during the first year gastrointestinal block students first are presented with a small group session on the impacts of climate change on human health in different communities and populations. Topics discussed included: defining terms such as planetary and one health, identifying health effects of climate change, health conditions increasing the risk of heat-related injury, the role of the healthcare system on climate change, and how to take an environmental health history.

First year students also work with standardized patients to practice patient interactions before clinical years. These standardized patient histories have been updated to include environmental exposures. One such patient encounter is of a patient with known COPD who experiences an exacerbation related to wildfire/pollutant exposure.

The small group session does not however give students tips on how to discuss the impacts of climate change on health with patients. This is discussed in the third and fourth year elective IDPT 8075 "Climate Change and Environment."

## 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:

Score explanation: In the new Trek curriculum, during the first year gastrointestinal block students first are presented with a small group session on the impacts of climate change on human health in

different communities and populations. Topics discussed included: defining terms such as planetary and one health, identifying health effects of climate change, health conditions increasing the risk of heat-related injury, the role of the healthcare system on climate change, and how to take an environmental health history.

First year students also work with standardized patients to practice patient interactions before clinical years. These standardized patient histories have been updated to include environmental exposures. One such patient encounter is of a patient with known COPD who experiences an exacerbation related to wildfire/pollutant exposure.

In the second year clerkship curriculum, students participate in a didactic learning session based on respiratory diseases pertaining to environmental exposures. During this interactive session, students are taught how to determine risk factors for developing asthma and making a pediatric asthma action plan, asking about pet/mold/allergen exposures, and identifying other environmental triggers for dyspnea.

#### 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:

Score explanation: A group of students named "CHIP" (Climate Health Integration Project) is working with students, deans and faculty to integrate climate change curriculum throughout the 4 year core curriculum. Their work, with the support of the Director of the Climate and Health Program within Undergraduate Medical Education, has integrated more concepts of planetary health into the core curriculum for first years. They are also working to increase the number of team based learning (TBL) cases in the second year curriculum that include topics of planetary health. Their ultimate goal is to have 25% of TBL cases include some amount of prework or discussion material on environmental impacts or planetary health.

### 1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> 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: At the University of Colorado School of Medicine, as discussed in previous sections, planetary health/ESH topics are integrated into the core medical student curriculum. This education is provided in the gastrointestinal and pulmonary blocks in Year 1 and touched on again in Year 3. During clerkship rotations in year 2, there are ten team-based learning cases that explore topics in planetary health (taking an environmental history and environmental justice). The goal is to ultimately increase this number to 25% of team-based learning cases that explore topics in planetary health.

Students also have the opportunity to apply to the Fort Collins branch which integrates a One Health perspective throughout all 4 years of the curriculum with more continuity. This is encapsulated in the "Trail" initiative wherein 3rd and 4th year students may develop projects in health systems research, public health advocacy, and occupational/environmental health planning. This One Health curriculum consists of an interdisciplinary program for students from the school of medicine, veterinary sciences, and graduate students in fields like public health and construction engineering to advance health for humans, animals, and the environment in collaboration with Colorado State University.

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:

1

Score explanation: Following the publication of CU's first Planetary Health Report Card, Dr. Beth Gillespie was hired as the Director of Undergraduate Medical Education for the Climate and Health Program at CUSOM. In this position, she oversees the course content that delivers planetary health materials across the core curriculum and all four years of medical school. While there are a number of faculty overseeing the redesign of CU's curriculum, there is no designated faculty dedicated to specifically oversee the incorporation of planetary health and sustainable healthcare. Last year, a group of medical students, led by Dr. Elizabeth Gillespie, established CHIP (Climate Health Integration Project) within CU-CHASE. The students in CHIP are working to integrate more planetary health concepts throughout the core curriculum. CU-CHASE is a campus-wide, interprofessional organization focused on sustainability.

Back to Summary Page <u>here</u>

#### **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:	
Score rissigned.	١.

Score explanation: There are several faculty members at CUSOM whose primary research focus is in planetary and climate health. These include Rosemary Rockford, PhD, Jay Lemery, MD, and Richard Johnson, MD among others. Additionally there are many faculty members at CUSOM that are conducting research in planetary health and healthcare sustainability via many different avenues.

The Colorado Consortium for Climate Change & Health is associated with the School of Medicine (though not directly included within it) and it has a list of faculty members at CUSOM conducting research related to climate, health and sustainability. Their research focuses on four aspects: 1. Heat Stress, 2. Respiratory Disease, 3. Worker Health, and 4. Infectious disease.

The faculty members at CUSOM involved with planetary health research are involved with institutions outside of the School of Medicine enacting climate change measures on a broader scale. Such institutions include the National Academy of Medicine Action Collaborative on Decarbonizing the Health Sector, Centers for Disease Control and Prevention, US Department of Health and Human Services EcoAmerica, and the U.S. Department of Defense Arctic Medical Operations team.

### 2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u>?

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: The University of Colorado plays host to many such groups. First among them, the Colorado Consortium for Climate Change & Health whose mission it is to "address current and future health issues affected by climate variability and change by bringing together a multidisciplinary team of clinicians, biomedical scientists, public health practitioners, epidemiologists, and anthropologists, along with atmospheric scientists and climatologists." Their research focuses on four key areas: 1. Heat Stress, 2. Respiratory Disease, 3. Worker Health, and 4. Infectious disease. The Consortium also consists of faculty conducting climate research across multiple disciplines and institutions including CU Boulder, the CU School of Public Health, the University of Hawaii-Manoa Department of Geography, the National Center for Atmospheric Research, and the Rocky Mountain Center for Total Worker Health.

Outside of the Consortium is the <u>CUSOM Climate and Health Program</u>, a program dedicated to medical student and graduate education and research in climate change and health. The site hosts projects across a variety of disciplines that are accessible to students, clinicians, and faculty across all levels of their training.

Additionally, in 2017, CUSOM started the nation's first graduate medical education <u>fellowship in Climate & Health Science Policy</u> with the goal "to train highly credible, knowledgeable health leaders in clinical, basic science, and policy settings." There are 5 current fellows in the CHSP program, and alumni have gone on to positions such as the chair of the Climate and Health group for the Society of Academic Emergency Medicine (SAEM) and the director of the Columbia University Global Consortium on Climate & Health Education.

Finally, the University of Colorado School of Public Health has an <u>Environmental & Occupational Health</u> department. Their research includes agricultural health and safety, air pollution, chronic beryllium disease, environmental health law and policy, ergonomics, industrial hygiene, and oil and gas activities. In 2024, CSPH EOH began to offer a <u>PhD in Climate and Human Health</u>.

# 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:

Science (ACCORDS) has a community advisory panel designed to help researchers gather patient feedback on research projects. The input from this community advisory panel, which includes individuals disproportionately impacted by climate change, has been used for a community heat vulnerability research project. While this group is not specifically focused on communities disproportionately impacted by climate change and environmental justice, it could serve as a vector for gaining input on the medical school's research agenda. Community groups were also invited to the Colorado Consortium on Climate and Health Symposium hosted by CUSOM in March 2024. Being more proactive about engaging in discourse with these vulnerable communities about how best to use our resources could be a major source of improvement for CUSOM going forward.

#### 2.4. Does your <u>institution</u> 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:

Score explanation: The <u>Climate & Health Program</u> at CUSOM has the mission to advance education and outreach. The website is comprehensive and has information and opportunities for education for medical students and more. It houses information regarding upcoming events, faculty and students involved in planetary health, and more resources for interested students. Though the website is continually undergoing updates and is up to date for the most part, there have been no updates to the events page for almost 2 years despite multiple climate health relevant events having been hosted in this time frame.

## 2.5. Has your <u>institution</u> 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:

4

Score explanation: The University of Colorado School of Medicine has hosted multiple events related to planetary health, two of which took place within one year of the finalisation of this report (02/11/25). On February 29, 2024 CU's Center for Interprofessional Practice and Education hosted an author talk and discussion with Dr. Mona Hanna-Attisha, MD, MPH about lead poisoning in children after the Flint, MI tragedy and her battle to expose this truth. CU also hosted a C4Health24 symposium on March 7, 2024 where climate and health researchers from across the front range of Colorado were invited to discuss the current and future state of climate change and health.

At this time of this report, there is no indication that the institution has planned such a conference or event within the next year. Given the extensive list of faculty working on planetary health, CUSOM appears to be dedicated towards being a leader in the field of planetary health research. If the school wishes to continue to foster this reputation, continuing to host such events should be a priority going forward, and represents a possible area for improvement in future reports cards.

## $2.6. \ Is \ your \ \underline{institution} \ a \ member \ of \ a \ national \ or \ international \ planetary \ health \ or \ ESH/ESV \ organisation?$

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

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

Score Assigned:

1

Score explanation: The University of Colorado School of Medicine is affiliated with the <u>Global</u> <u>Consortium on Climate and Health Education</u>.

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

94.1%

#### **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 <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 has participating in community focused events relating to planetary health. (1 point)

No, there is **no** such meaningful community partnership. (0 points)

Score Assigned:

Score explanation: CUSOM has multiple community partners that promote planetary and environmental health, which maintains this score from the 2023 Report Card. In July 2023, the formal Service Learning curriculum—wherein medical students could partner with community organizations—underwent curricular reform resulting in the suspension of mandatory engagement with these organizations; however, in July 2024, the Office of Access & Engagement hired a new employee to reinstate mandatory CBO engagement for all medical students starting July 2025 and formalize updated partnerships with over 70 community-based organizations (CBO). These CBO partnerships were maintained throughout the curriculum reform period. The list of these partnerships will be revisited for next year's report card, though a representative of the Office of Access & Engagement anticipates that the majority of the community organizations will be retained in 2025. In 2024, first year medical students were still required to engage with the coursework associated with the Service Learning curriculum.

In years past, students were required to participate in a longitudinal service learning experience that addresses the mutually-agreed upon needs of a CBO. In 2024, students were able to engage with CBOs on an elective basis. Such partners included: 2040 Climate Change and Health Equity, whose mission is to create sustainable community partnerships and by identifying, measuring, and applying local solutions; 350 Colorado, an organization focused on ending fossil fuel dependence and transitioning to green energy sources across Colorado; and the Street Dog Project, where medical students provide medical care to people experiencing homelessness and environmental exposures and veterinary students provide care to their animals.

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

Score Assigned:

3

Score explanation: In 2024, the University of Colorado has offered multiple community-facing courses and events concerning environmental health and One Health, including a seven month-long art showcase event for CUSOM's One Book One Campus (OBOC), "The Immortal Life of Henrietta Lacks" by Rebecca Skloot. This event partners with the CU Center for Interprofessional Practice and Education and is open to the public. There are multiple culminating events in this series occurring in 2025, but the primary public-facing events in this series in 2024 occurred at the end of the calendar year. The 2024-2025 OBOC series covers concepts of One Health in the context of health and racial inequities present in the American healthcare system. As in years past, these events are open to the public, and in 2025, this series will feature three distinct community circles occurring between February and April.

In addition, the University of Colorado Boulder campus offered multiple public engagement and comment-writing sessions for the University of Colorado's Climate Action Plan—which is inclusive of the University of Colorado School of Medicine—under development throughout 2024. There were multiple community advocacy days, zero waste sessions, and farming events partnered with Harvest of All First Nations, an organization that focuses on Indigenous-led reparations and rematriation efforts in Colorado. Because these events were specifically community-facing, this score is increased from the 2023 report card.

## 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:

2

Score explanation: CUSOM features weekly school-wide communication from the Office of Student Affairs with updates about what sustainability and planetary health initiatives are happening on campus. There are additional updates through the Office of Accessibility and Equity's Community and Campus Connections emails that highlight community-based efforts in environmental justice and health. There is also a biweekly campus-wide email thread entitled CU Anschutz Today which has featured planetary health and sustainability topics in many of its emails over the past year. In 2024, following the hiring of three full-time employees, the Office of Sustainability also began sending out quarterly email blasts to the entire CU faculty, staff, and student body highlighting CU's sustainability updates. Due to the increase in frequency of these environmental health updates, this section receives a full score.

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 provider. (1 point)

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

Score Assigned:

Score explanation: As in years past, CUSOM and its affiliated hospital trust continues to offer postgraduates an opportunity to engage with planetary health through the Climate and Health Program's Diploma in Climate Medicine in partnership with Wilderness Medical Society. This program offers clinicians hands-on experiences with the science of climate change and its implications on the practice of medicine. The diploma covers the following courses (each course is 60 hours a piece with a total of 300 learning hours for the completed program): Foundations and Updates in Climate Medicine; Developing Sustainable Hospital Systems; Disaster Response and Recovery; Community Resilience: Energy Innovation & Healthy Infrastructure; and Global Challenges. The program is offered twice-yearly and enrolls approximately 20 clinicians at each offering. 2024 was also the inaugural year of the Health Equity Action Lab program, wherein clinical teams underwent health equity training to discuss issues facing local communities. In addition, there was a cross-campus partnership event entitled AB Nexus between CU Anschutz and CU Boulder in January 2024 wherein researchers in climate change and human health convened to discuss emergent issues and research in planetary health. Finally, there are internal workgroups at UCHealth pulling faculty from multiple departments within the UCHealth system to develop sustainability initiatives applied to the overall hospital system. This section therefore receives a full score and is unchanged from the 2023 Report Card.

3.5. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> 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: CUSOM has affiliations with UCHealth, Veterans Affairs (Colorado Division), Denver Health, and Children's Hospital Colorado. Each of these systems has websites with articles detailing research, news stories, and events about patient health and environmental exposures. This includes news stories, research opportunities, clinical trials, public events, and other patient-directed stories. The School of Medicine has a News page that offers stories about specific exposure events in 2024, including avian influenza and eastern equine encephalitis. Under UCHealth's website, there is a new section as of 2024 entitled "UCHealth Today" where patients can read news articles about environmental health exposures, including articles covering acute worsening air quality events during the 2024 wildfire season. The VA has "Stories", "Events", and "News Releases" sections on its website, with veteran-specific stories and achievements that featured environmental health topics including exposures in the past, though none in 2024. Denver Health has a Pediatric Environmental Health Specialty Unit section on their website featuring patient-facing information about health issues stemming from environmental health exposures, including information about childhood asthma, heavy metals, and indoor air pollutants. Finally, Children's Hospital Colorado has a Community Health page featuring research and services pertaining to annual community health needs assessments, which highlights specific issues in environmental health and safety identified in these annual needs assessments. Because the School of Medicine offered information about exposure events in 2024, this section received a full score despite lacking information across all affiliated hospital websites.

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

Yes, the **medical school** or <u>all</u> **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:

2

Score explanation: There are no significant changes in this year's educational materials on climate change and health impacts from the previous year's findings. The CU School of Medicine offers educational materials for patients about climate change and health impacts, including articles under the News page covering such topics as the relationship between eye disease and climate change, health impacts of air pollutants, and the mental health impacts of extreme weather events, which earns this section a full score. On the UCHealth website, "UCHealth Today" featured patient-facing articles throughout 2024 that discuss general topics related to climate change and health as indicated in 3.5 above. In addition to the Pediatric Environmental Health Specialty Unit website covering general issues related to exposures, Denver Health has a link on its front page to the Colorado Department of Public Health and Environment with resources specific to the local

impacts of climate change on health including education about heat stroke prevention. Beyond the News and Research sections highlighted in section 3.5, the VA and Children's Colorado do not have specific pages or materials about the health impacts of climate change.

Section Total (14 out of 14)	100%
------------------------------	------

Back to Summary Page <u>here</u>

#### **Support for Student-Led Planetary Health Initiatives**

<u>Section Overview:</u> 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** *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:

Score explanation: The University of Colorado offers the President's Sustainable Solutions Challenge. Students are asked to develop ideas for improving environmental quality, economic and resource efficiency, and/or social equity on campus. Students, individually or in teams, develop ideas and present them to a panel of judges for a \$1,500 cash prize.

2

CUSOM also has a mentored scholarly activity (MSA) proponent of the medical school curriculum. Within this curriculum there are the following subsets: Laboratory Science Research; Bioethics, Humanities, Arts and Education; Clinical Science Research; Global Health; and Public Health and Epidemiology. Within the public health curricular structure there is no mention of sustainability or climate and health. There is no QI requirement for medical students to graduate from CUSOM, but some students have elected to engage in QI projects centered around climate health to satisfy the MSA requirement.

### 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 these out and carry them out in their spare time. (1 point)

There are <b>no opportunities</b> for students to engage in planetary health/sustainable healthcare research. (0 points)		
Score Assigned:	1	
Score explanation: There are many opportunities to planetary health topics through the CU-Consor individual mentors. However, there is not a specif students at this time. Students must seek these opptime. There is work being done to create more students community outreach and volunteering, who students to do research related to planetary health	rtium for Climate Change, CU-CHASE, and fice research or fellowship program for medical portunities out and carry them out in their own dent opportunities to get involved in research will hopefully increase the opportunities for	

CUSOM offers the Physician Fellowship in Climate Medicine for medical school graduates. Sadly, however, medical students are not eligible. This is a GME accredited fellowship in Climate and Health policy with the goals of, "[training] highly credible, knowledgeable health leaders in clinical, basic science, and policy settings." The fellowship is a 12 month long course in which participants are expected to attend didactics, workshops, and complete a project with a federal or nonprofit organization.

4.3. Does the <u>institution</u> 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: 1	
-------------------	--

Score explanation: Starting in 2023, CUSOM began maintaining a medical student-facing website that contains details of projects related to planetary health—including the PHRC, student groups, ongoing climate and health activities at the school, student leaders, current projects involving planetary health and sustainability—and offers students the opportunity to get involved with any of the above listed projects by listing relevant points of contact for each. This information however, has not been updated for two years, so while the projects listed are still relevant, the specifics are no longer as relevant as they were when the website was initially created.

CUSOM has other separate climate and health pages on the medical school website targeting audiences at other levels of education and professional advancement. This website offers information on educational courses, news, and events at CUSOM. Potential project mentors can be found on this website as the core faculty and advisory committee members are listed; however, there is still no individual contact information nor any updated information on current faculty

projects. This is unchanged from the 2023 PHRC. Revamping this website such that information on how to get involved as a student in volunteering, obtaining research and grants, finding mentorship, and connecting with relevant organizations and events on campus is more easily accessible is a very actionable way to improve this score going forward.

With CU's new curriculum, first year medical students have the option to apply to the new Fort Collins branch for their four years of medical school education. This four-year branch campus in Fort Collins, in partnership with Colorado State University (CSU), has a focus on the concept of One Health. CSU's One Health Institute's goal is to advance health for humans, animals, and the environment in addition to solving problems at the intersection of these three entities. To learn more about this program, the CUSOM website transfers you to CSU's webpage that includes more information on the program, community outreach, faculty, and research opportunities. Research opportunities include an award of up to \$75K in funding for 2-4 R&D proposals and up to \$10K for ideation and network development proposals including attending meetings and workshops.

4.4. Does your <u>institution</u> 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: This score has remained unchanged for the past two years' report cards. The University of Colorado's Climate Health Advocacy, Sustainability, and Education (CU-CHASE) is an interdisciplinary student group focused on advancing student-led initiatives in the avenues of climate advocacy, campus sustainability projects, and education. The group receives annual funding through the Student Senate and Medical Student Council and is supported by a faculty mentor. There is a PHRC committee within CU-CHASE as well as a Climate and Health Curriculum Integration Project (CHIP) student group, and the PHRC also has a separate faculty advisor. The campus also has a chapter of Medical Students for a Sustainable Future that has its own faculty advisor.

4.5. Is there a student liaison representing sustainability interests who serves on a <u>department or institutional</u> decision-making council to advocate for curriculum reform and/or sustainability best practices?

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: Since Spring of 2022, the University of Colorado School of Medicine has had two medical student Sustainability representatives per medical school class that are elected by their peers to serve on the Medical Student Council. Their job is to advance sustainability initiatives on campus, advocate for sustainability during MSC event planning, serve as an intermediate between students, faculty, and student organizations to unite and improve planetary health efforts on campus.

4.6. In the past year, has the <u>institution</u> had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	Score
Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.	1
Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	1
Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.	1
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	0
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	0
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1

Score explanation: CUSOM's Fort Collins Branch integrates a One Health framework as part of its curriculum. Students can be matched with service-learning opportunities in sustainable food systems and community supported agriculture.

CUSOM provides numerous lectures throughout the academic year via the CU Climate consortium lecture series, CU climate and health program, and from the student-led group CU-CHASE. There is a tab for events on the CU Climate and Health website, but no new events have been listed there since 2022, so finding the events and lectures requires more digging than it ought to.

First year medical students also attend a mandatory session, integrated into the new curriculum, in which they learn from CU faculty about the obstacles to addressing climate change in medicine, success stories for integrating more sustainable practices into the CU health system, and important focuses for making further progress in climate health at CU.

CU-CHASE has hosted several events over the past year in conjunction with Healthy Air and Water Colorado and Healthier Air Colorado that have helped students gain skills and knowledge on writing OpEds and getting involved in legislative advocacy. CU-CHASE has also spread awareness

to students of community events related to the topic with opportunities to speak to legislators and policy makers in the Denver area.

There is also a two-week wilderness medicine elective available to third and fourth year medical students in which they go to Estes Park for one week and Moab for one week. During this course, students learn wilderness medicine principles in small group and lecture-based formats, and then learn to apply their knowledge through participation in outdoor scenarios in Estes Park and Moab.

Section Total (11 out of 15) 73.33%

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: Over the last year, The University of Colorado Anschutz Medical Campus has hired three new full time employees to implement a Green Labs program, waste diversion efforts, transportation, and grant securement. Additionally, this past year our university has created a Sustainability Implementation Team and Sustainability Council that includes university staff and hospital staff and a few medical students and other health professional students. Our senior sustainability manager on the university's medical campus is Jarrett Smith who has been in this position for the last several years and helped catalyze the hiring of the additional sustainability staff, resources and planning. At UCHealth, our university's associated hospital, Peter Tozzi is the sustainability program manager. At Children's Hospital of Colorado, the children's hospital associated with the university, John Hudgens is the sustainability manager. There are also two sustainability representatives per class (a total of eight medical students) on the medical student council and one sustainability leader on the student senate that represents all the health professional programs.

#### 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/medical school does **not** meet any of the requirements listed above (0 points)

Score Assigned:

Score explanation: The University of Colorado is required to adhere to the state of Colorado's Climate Action Plan. We are committed to achieving carbon neutrality by 2040, and this encompasses the medical school, through our CU Anschutz' Climate Action Plan (CAP) and Energy Master Plan (EMP) in the final stages of development. This will be explained briefly below, more information can be found: at the hyperlink. SB23-016 calls for the following reductions from our greenhouse gas emissions (GHGs) baseline: the school must reduce GHGs by at least 26% by 2025, GHGs by at least 50% in 2030, GHGs by at least 90% by 2045, GHGs by 100% by 2050. The baseline was obtained during the academic year of 2006/2007. Energy Use Intensity (EUI) reduction goals were established by HB21-1286 and require the following reductions from a 2021 baseline: 7% reduction in EUI by 2026 and 20% reduction in EUI by 2030. The CAP to reach these goals is currently under development with stakeholder workshops in November 2024, January 2025, and May 2025, and public town halls in February and April 2025, and June 2026. The CAP will be published in July 2025. The CAP will also address Scope 3 greenhouse gas reduction, water use, waste diversion, education, campus curriculums and policies, and sustainability in research. The CU System has also developed sustainability and climate action goals as part of the CU System Strategic Plan created in 2020. This plan has differing goals for each CU campus to meet by 2026 and includes its own GHG and EUI reduction goals. These goals are a 15% reduction in GHG emissions (2019 baseline) and a 10% reduction in Energy Use Intensity (2019 baseline). Other strategic goals include a commitment to 5% on-site renewable energy generation, transitioning 20% of fleet vehicles to electric, as well as the development of an Energy Master Plan and a new Climate Action Plan. Here is a link to our sustainability page for more information. Two large hospitals on campus, Colorado Children's Hospital and University of Colorado Hospital share the same campus with CUSOM. The sustainability manager is unsure if these separate organizations have goals to reduce carbon emissions as they have never been communicated to the team at CUSOM. They function relatively separately from the University campus.

The university has put  $\sim$  \$6 million into energy conservation measures in the Research 1 complex in 2024 which will reduce GHG emissions by 4,000 MT/CO2. The University has also allocated about \$1 million into creating the Climate Action Plan and Energy Master Plan with the help of consultants hired by our executive leadership.

### 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:Not only are we working on expanding our renewable energy on campus, but we are working diligently on energy reduction. Our recent focus has been on utilizing the existing infrastructure already in place to improve efficiency versus building new infrastructure which we believe is a more sustainable practice. Some of the specific work we have done in this space includes creating an energy master plan that includes a plan to reduce energy demand by 20% by 2030 that is currently in process of approval and implementation. Nearly all of the lighting on campus has been transitioned to LEDs. We have built a new police building on campus that is a net zero building. We plan to implement net zero building in new construction on campus. Renewables are in the CAP and energy master plan, but we have a large focus on energy conservation and electrification at this time.			
5.4. Are sustainable building practices utilised for new and old buildings on the <u>institution's</u> campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?			
Yes, sustainable building practices are utilised for <b>majority</b> of old buildings <b>have been retrofitted</b> to	new buildings on the institution's campus and the to be more sustainable. (3 points)		
Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have <b>not been retrofitted.</b> (2 points)			

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

Score Assigned:

(1 point)

Score explanation: Any new construction on University of Colorado's campus and major renovation projects are at LEED Gold certification. Our new police building on campus is a net zero building. Energy conservation measures are a major focus for our campus in our energy master plan.

Sustainable building practices are **inadequately or incompletely** implemented for new buildings.

3

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

Yes, the institution has implemented strategies to encourage and provide **environmentally-friendly transportation options** such as safe active transport, public transport, or carpooling and these options are well-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default. (2 points)

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

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

Score Assigned:

2

Score explanation: The University of Colorado has had a large focus on sustainable transportation in the past year. More information can be <u>found here</u>. We have hired a new employee, a student research assistant, and his main role has been to pull together transportation and transit options on campus and improve usage of sustainable transportation on campus. Everyone on our campus gets an RTD EcoPass (transit pass)) if they pay for parking. We also have a shuttle service on campus and discounted parking rates for carpooling to work. Zipcar is coming back to campus to encourage getting to campus by bus or light rail and allow for car use if necessary when already on campus. Our campus also has substantial bike infrastructure on campus.

## 5.6. Does your <u>institution</u> 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: One of our new sustainability FTE hires is dedicated to waste diversion coordination and one of her large projects in 2024 and 2025 is improving our composting, recycling, and waste management on campus. All buildings have access to recycling. All of the food services have a compost bin on campus and these areas are scattered across the campus buildings. All faculty and students have access. The School of Medicine has compost accessibility through our facilities website for events. We are working on expanding our composting program to make it even more accessible throughout the campus. We collaborate with Wompost, our local composting partner. As our composting efforts and levels increase, it is possible we fund and create our own, on site composting service.

### 5.7. Does the <u>institution</u> apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?

Yes, the institution has a**dequate 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:

1

Score explanation: All of the cafes and food services on campus have vegan and/or vegetarian options. A new smoothie vendor on campus has opened on campus serving solely vegetarian options. Overall, most of our vendors and local partners do emphasize local products and sustainable options. People desire more sustainable and local options but there is nothing specific requiring upstream and downstream food and service requirements. However, no policy in place to tell vendors what they can and cannot bring for events.

### 5.8. Does the <u>institution</u> apply sustainability criteria when making decisions about supply procurement?

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

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

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

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

Score Assigned:

2

Score explanation: Our campus is devoted to changing procurement processes to move in a more sustainable direction than they are now. One of our campuses major focuses right now is freezers and procurement of more sustainable freezers. CU Procurement has a Sustainability Procurement Program, which can be found here: <a href="https://www.cu.edu/psc/about-us/sustainable-purchasing-cu">https://www.cu.edu/psc/about-us/sustainable-purchasing-cu</a>.

5.	9	Are	there	sustainability	requirements	or guidelines fo	r events hosted	d 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: We have options for recycling and compost but do not have requirements for events hosted on campus. If an event is hosted in one of our campuses major event hosting space, the Health and Sciences Building, the hosts are required to use the restaurant within this building, T Street. We are working with this restaurant (3rd party contractors) on incorporating more sustainable practices such as using reusable utensils, compostable options.

### 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

Score explanation: In 2024 CU Anschutz started a new Green Labs Program and hired an FTE Green Labs Coordinator. As part of the program, CU Anschutz is piloting a sustainability certification for laboratories through My Green Lab. Additionally, the campus is participating in the 2025 freezer challenge to reduce energy consumption for the 700+ ultra-low temperature freezers on campus. More initiatives will be launched as the program develops.

#### 5.11. Does your <u>institution's</u> 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:

1

Score explanation: Our institution has no control over the endowment portfolio. That is controlled by the University of Colorado system which includes several campuses across the state. The endowment portfolio is directly connected to peoples' retirement and savings. There are movements towards divestment from fossil fuels, such as the University of Colorado organization "Fossil Free

CU." The system does allow choices for a more green investment portfolio, but at this time there is no formally announced partial or full commitment at the University level to fossil fuel divestment.

Section Total (18 out of 32)	56%
------------------------------	-----

Back to Summary Page <u>here</u>

#### **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%
В	60% - 79%
С	40% - 59%
D	20% - 39%
F	0% - 19%

<sup>\*</sup>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 University of Colorado School of Medicine

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(51/72) \times 100 = 70.83\%$	В
Interdisciplinary Research (17.5%)	(15/17) x 100 = 94.1%	A
Community Outreach and Advocacy (17.5%)	(14/14) x 100 = 100%	A
Support for Student-led Planetary Health Initiatives (17.5%)	$(11/15) \times 100 = 73.3\%$	В
Campus Sustainability (17.5%)	$(18/32) \times 100 = 56\%$	C+
Institutional Grade	(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 77.85%	B+

#### **Report Card Trends**

#### **Section Overview**

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

# Planetary Health Report Card Trends for University of Colorado School of Medicine

