



Planetary Health Report Card:

Faculty of Medicine and Health Sciences, McGill University



McGill

**Faculty of
Medicine and
Health Sciences**

2020-2021 Contributing Team:

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Summary of Findings

Curriculum	C
<ul style="list-style-type: none"> Planetary Health (PH) connections exist within the core medical curriculum but they are only briefly covered and are mostly found within a solitary lecture dedicated to climate change and health. PH connections in the curriculum should be made more explicit, with more dedicated time allocated consistently throughout the medical education. The medical school should identify PH (including climate change) as a priority theme and include that material in learning objectives and test questions, in addition to filling in content gaps. 	
Interdisciplinary Research	C
<ul style="list-style-type: none"> McGill University hosts an annual Sustainability Research Symposium (SRS), as well as other conferences, events, and workshops relating to PH. McGill lacks a dedicated institute for interdisciplinary PH research that emphasizes the impacts of anthropogenic environmental changes on health. The medical school may draw from groups such as the Environmental Epidemiology Research Group or the McGill Global Environmental Health group. Within the Faculty of Medicine and Health Sciences itself, it is difficult to find faculty members who have a primary research focus in PH or healthcare sustainability. 	
Community Outreach and Advocacy	C-
<ul style="list-style-type: none"> The Faculty of Medicine and Health Sciences does not offer community-facing education opportunities on PH. This extends to a lack of patient materials regarding environmental health exposures, as well as climate change and health impacts. There is limited partnership between the medical school and community organizations to promote planetary and environmental health. The faculty could augment meaningful partnerships and promote medical student involvement through the addition of relevant community organizations in the Community Health Alliance Project (CHAP) course. 	
Support for Student-Led Initiatives	C-
<ul style="list-style-type: none"> Overall, the administration is supportive of student-led PH initiatives. The McGill Sustainability Projects Fund has a mandate to build a culture of sustainability on McGill campuses. They offer their time, funding, and enthusiasm for student projects from all faculties. Within the Faculty of Medicine and Health Sciences, the administration could further support student-led initiatives by facilitating connections between research mentors and students, creating grant opportunities, and developing a student fellowship program designated for PH. 	
Sustainability	B-
<ul style="list-style-type: none"> The McGill University Climate and Sustainability Strategy 2020-2025 includes a stated goal of carbon neutrality, as well as objectives pertaining to waste management, food systems, procurement, and more. However, it is unclear how these strategies translate to the medical school buildings. Despite having initiatives to make laboratories more environmentally sustainable, the Faculty of Medicine and Health Sciences should work towards extending sustainable practices through composting, sustainable food and beverage options, and waste management. 	

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance defines planetary health as “a field focused on characterizing the human health impacts of human-caused disruptions of Earth's natural systems.” This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanization, 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 color, 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 medical schools, we have created a Planetary Health Report Card that medical students internationally can use to grade and compare their home institutions on an annual basis. This medical-student-driven initiative aims to compare medical schools 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 centered on environmental health impacts 5) medical school campus sustainability.

Planetary Health Curriculum

Section Overview: This section evaluates the integration of relevant planetary health topics into the medical school curriculum. Today's medical students will be on the frontlines of tackling the health effects of climate change. Therefore, it is critical that medical students are trained to understand the health effects of climate change, as well as planetary health 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. Did your medical school offer elective courses to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
3*	Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year.
2	Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year.
1	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.
0	No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
<p><i>Score explanation: There is one Undergraduate Medical Education elective called “Public Health and Preventive Medicine” (link). It is available to McGill clerkship students and offers the possibility to do environmental health work related to climate change (environmental hazards, reportable infectious diseases) in a variety of domains (health surveillance, protection, promotion and prevention). There were no other elective courses offered by the medical school related to planetary health in the last year (link).</i></p>	

Curriculum: Health Effects of Climate Change

2. Does your medical school curriculum address the relationship between extreme temperature health risks and climate change, as well as the socioeconomic/racial disparities in extreme heat exposure?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: There is one lecture (named “Climate and Health”) in the core medical curriculum that addresses the relationship between heat-related illness and climate change (air pollution and quality, extreme heat, vulnerable populations). However, it did not touch on the disparities between populations.

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

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: There is one lecture (named “Climate and Health”) in the core medical curriculum that addresses the relationship between heat-related illness and climate change (air pollution and quality, extreme heat, vulnerable populations).

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

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: There are no classes in the core medical curriculum or elective coursework that address the impact of climate change on the changing patterns of infectious diseases. However, there is an elective course on Infectious Diseases in the setting of Internal Medicine electives for clerkship students ([link](#)), but it does not necessarily link to climate change.

5. Does your medical school curriculum address the cardiorespiratory health effects of climate change, including air pollution?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.

0	This topic was not covered.
<p><i>Score explanation: In 2020-2021, the Block A (Molecules to Global Health) lecture on climate change and health primarily addressed the effects of climate change on respiratory health (via air pollution and air quality). Environmental pollution impacts on respiratory health was also mentioned in Block B (Respiration).</i></p>	

6. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Score explanation: The mention of mental health impacts of extreme weather as a result of climate change was present on a couple of slides or infographics in the lecture “Climate Change and Health” of the Molecules to Global Health course. The topic was however not directly addressed by the lecturer.</i></p>	

7. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Score explanation: In the lecture “Maternal and Child Health of the Indigenous Population in Canada” of the Reproduction and Sexuality, Dr. Horn mentions that the numerous polluting industries surrounding the Akwesasne territory has introduced toxic compounds in the air, which impacts the food chain, including mother’s milk. The changes in the ecosystem health impact the health of the populations who are getting water and food directly from their environment. For Native people especially, the contamination of their ecosystem impairs their ability to feed themselves.</i></p>	

8. Does your medical school curriculum address the outsized impact of climate change on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, and older adults?	
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3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: In the lecture “Climate Change and Health” of the Molecules to Global Health course, Dr. Richer mentions that living circumstances, such as lower income, malnutrition and lack of cooling options, are potent risk factors for heat-related disease in extreme heat. The mortality rate of these conditions were found to be 1-2% higher in people living in poverty as well as in the African American population. In the Reproduction and Sexuality course, the lecture “Maternal and Child Health of the Indigenous Population in Canada” by Dr. Horn highlights that the impact of exposure to toxic contaminants due to climate change is more extensive in Indigenous communities since their lifestyle heavily relies on local products and wildlife.

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

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: In the Molecules to Global Health course, the lecture “Climate Change and Health” comprises a graph portraying the global burden of disease due to air pollution in several countries. It highlights the unequal health impacts of air pollution amongst developed and developing nations. The rest of the lecture was focussed on North American issues.

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

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

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: In the lecture “Maternal and Child Health of the Indigenous Population in Canada” of the Reproduction and Sexuality, Dr. Horn mentions that the numerous polluting industries surrounding the Akwesasne territory has introduced toxic compounds in the air, which impacts the food chain including mother’s milk. No effects on the reproduction per se were discussed.

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

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: In Quebec, the presence of heat waves have an impact on the health of the surrounding community. The lecture “Climate Change and Health” in the Molecules to Global Health course used a case series of extreme heat at a local hospital to demonstrate how climate change can affect health. The lecture explored the anthropogenic causes of Urban Heat Islands (a built environment that is hotter than surrounding rural areas).

12. Does your medical school curriculum address the unique climate and environmental health challenges that have impacted and are impacting Indigenous communities?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: The lecture “Global Governance” in the Molecules to Global Health course mentioned the impact of climate change on arctic life and the threat posed to Indigenous communities with the earlier melting of ice. A slide was included with a video titled “Climate change: Inuit culture on thin ice,” however the video itself was not played in class.

13. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, and older adults?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.

1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Score explanation: The lecture “Maternal and Child Health of the Indigenous Population in Canada” given in the Reproduction and Sexuality course covers the outsized impact of PCBs, dioxins, DDT, and other toxic compounds on Indigenous communities. This lecture discusses how industries in proximity to Indigenous communities have increased the exposure to toxic contaminants in the environment. Consequently, impacting local food, fish, and mother’s milk.</i></p>	

Curriculum: Sustainability

14. Does your medical school curriculum address the environmental and health co-benefits of a plant-based diet?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Score explanation: There are no classes in the core medical curriculum that address the environmental and health co-benefits of a plant-based diet.</i></p>	

15. Does your medical school curriculum highlight the waste generated by the healthcare system and identify ways to advocate for and implement sustainable best practices in health care?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Score explanation: The lecture “Climate Change and Health” in the Molecules to Global Health course presents the impact of healthcare as polluters in terms of carbon emissions. Strategies towards greening practices include: greener building practices, waste management, environmentally preferable purchasing, safer chemicals, water use, initiatives to reduce urban heat island, food choices in cafeterias and at conferences. These were listed on a single slide, and did not offer any further exploration.</i></p>	

Curriculum: Clinical Applications

16. In training for patient encounters, does your medical school’s curriculum introduce strategies to have conversations with patients about the health effects of climate change?

2	Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum.
1	Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework.
0	No, there are not strategies introduced for having conversations with patients about climate change

Score explanation: To our knowledge, the medical school curriculum does not introduce strategies for having conversations with patients about climate change.

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

2	Yes, the core curriculum includes strategies for taking an environmental history.
1	Only elective coursework includes strategies for taking an environmental history.
0	No, the curriculum does not include strategies for taking an environmental history.

Score explanation: The first-year lecture “Occupational Lung Disease” by Dr. Jim Gruber discusses strategies, clinical questions, and potential pitfalls when obtaining a work/environmental history.

Curriculum: Administrative Support for Planetary Health

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

4	Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education.
2	Yes, the medical school is currently in the process of making minor improvements to ESH/planetary health education.
0	No, there are no improvements to planetary health education in progress.

Score explanation: There are efforts to increase planetary health education within the medical curriculum through the Social Accountability, Population Health & Health Advocacy Longitudinal Theme. However, progress is slow and there are no forthcoming major improvements.

19. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum?	
6	Planetary health/ESH topics are well integrated into the core medical school curriculum.
4	Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum.
2	Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s).
0	There is minimal/no education for sustainable healthcare.
<i>Score explanation: "Climate and Health" by Dr. Signe Richer is the only lecture in the core curriculum that addresses issues related to planetary health/sustainable healthcare.</i>	

20. Bonus: Does your medical school have a program that offers incentives for faculty/departments to develop new planetary health/ESH courses and/or incorporate planetary health/ESH into existing courses?	
1*	Yes, the medical school has an incentive program.
0	No, the medical school does not have an incentive program.
<i>Score explanation: There are no programs within the medical school that specifically offer incentives for the development or incorporation of planetary health/ESH content in the curriculum.</i>	

Section Total (29 out of 58)	29
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Are there additional curriculum resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Interdisciplinary Research

Section Overview: *This section evaluates the quality and quantity of interdisciplinary planetary health research at the medical school and 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, medical schools 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 emphasized.*

1. Are there researchers engaged in planetary health research and healthcare sustainability research at your medical school?	
4	Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health and healthcare sustainability.
3	Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health or healthcare sustainability.
2	Yes, there are individual faculty members at the School of Medicine who are conducting research related to planetary health or healthcare sustainability, but it is not their primary research focus.
1	There are planetary health and/or healthcare sustainability researchers at the institution, but none associated with the medical school.
0	No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time.
<p><i>Score explanation: At McGill's School of Medicine, some individual members conduct research on planetary health, notably Dr. Signe Richer (Climate Change and Health, mostly heat strokes) and Dr. Ojistoh Horn (Maternal-Child Health Issues in an Indigenous context), Dr. Mark Trifiro, Associate Professor, Division of Endocrinology and Metabolism of the Department of Medicine in the Faculty of Medicine (Link). It is difficult to find researchers with a primary research focus in planetary health in the School of Medicine. However, McGill's Department of Epidemiology, Biostatistics, and Occupational Health has a research group dedicated to environmental health and epidemiology: the Environmental Epidemiology Research Group. This group is formed by faculty members who have been conducting research in the areas of global health and environmental health (link). Also, there is the McGill Global Environmental Health group that focuses on grand challenges in global health, particularly those in low- and middle-income (LMIC) countries, that are related to environmental exposures (link).</i></p>	

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

3	There is at least one dedicated department or institute for interdisciplinary planetary health research.
2	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.
1	There is an Occupational and Environmental Health department, but no interdisciplinary department or institute for planetary health research.
0	There is no dedicated department or institute.
<p><i>Score explanation: McGill University has the McGill Global Environmental Health group that focuses on grand challenges in global health, particularly those in low- and middle-income (LMIC) countries, that are related to environmental exposures (link), but it is not a dedicated multidisciplinary department for research on health and the environment.</i></p>	

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 medical school?	
3	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.
2	Yes, there is a process in which community members impacted by climate and environmental injustice advise the climate + environmental research agenda.
1	No, but there are current efforts to establish a process for community members to advise or make decisions on the research agenda.
0	There is no process, and no efforts to create such a process.
<p><i>Score explanation: The McGill Social Accountability and Community Engagement Office of the Faculty of Medicine and Health Sciences has the task of developing programs supporting equity and diversity to ensure inclusive learning and work environments. These efforts are translated into equity-based admissions, teaching, and research. However, there is no formal research focus on planetary health and climate change decisions.</i></p>	

4. Does your institution have a planetary health website, or a website centralizing various campus resources related to health and the environment?	
3	There is an easy-to-use, adequately comprehensive website that centralizes 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.
2	There is a website that attempts to centralize various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive.

1	The institution has an Office of Sustainability website that includes some resources related to health and the environment.
0	There is no website.
<p><i>Score explanation: McGill's Office of Sustainability has their own website that includes the institution's Sustainability Strategic Plan for 2020-2025 (link), that has a sustainability projects fund and resources related to the research projects that they fund (link). This website has various campus resources, events and seems up-to-date. The McGill Global Health Programs also has its own page with research opportunities and public health initiatives, including an outdated (2018) funding opportunity "Innovative Solutions for Planetary Health: seed grants for interdisciplinary research" (link). However, McGill University does not have a centralized and comprehensive platform concerning planetary health research.</i></p>	

5. Has your institution recently hosted a conference or symposium on topics related to planetary health?	
4	Yes, the institution has hosted more than one conference or symposium on topics related to planetary health in the past year, including at least one on climate change.
3	Yes, the institution has hosted one conference or symposium on topics related to planetary health in the past year.
2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
1	The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
0	No, the institution has not hosted a conference on topics related to planetary health in the past three years.
<p><i>Score explanation: The Sustainability Research Symposium (SRS) is an annual one-day symposium (the 2021 January edition was a three-day virtual event) funded by the McGill Sustainability Systems Initiative (link). The McGill Sustainability Systems Initiative also hosted a few events in the past year (2020-2021): DECADE OF ACTION - PANEL AND WORKSHOP, Sustainability Webcasts, Workshop: Metrics for Sustainability Governance, Sustainable Foods Future: 10th Sustainability Research Symposium (link). Also, there have been several interdisciplinary global environmental health (planetary health) conferences held at McGill since 2015: "Global Environmental Health: From Cell to Society" (link) in 2015, "SustainableCities and Environmental Health Conference" (link) in 2017, "Cells to Society Symposium on 'Environment and Health' – Sustainable Materials" (link) in 2018.</i></p>	

6. Has your institution or medical school joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education?	
2	Yes, the medical school has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education.

1	Yes, the institution has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education, but the medical school specifically has not.
0	No, the institution has not joined the Planetary Health Alliance or the Global Consortium on Climate and Health Education.
<i>Score explanation: McGill's Faculty of Medicine and Health Sciences is not part of the Planetary Health Alliance or the Global Consortium on Climate and Health Education.</i>	

Section Total (9 out of 19)	9
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Are there additional research resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

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 color. 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.*

1. Does your medical school partner with community organizations to promote planetary and environmental health?	
3	Yes, the medical school meaningfully partners with multiple community organizations to promote planetary and environmental health.
2	Yes, the medical school meaningfully partners with one community organization to promote planetary and environmental health.
1	The institution partners with community organizations, but the medical school is not part of that partnership.
0	No, there is no such meaningful community partnership.
<p><i>Score explanation: The Community Health Alliance Project (CHAP) course provides a list of local organizations that medical students can volunteer with. One of these organizations is “Santropol Roulant” which fights food insecurity through sustainable and organic urban agriculture projects. To our knowledge, this is the only partner community organization that promotes planetary and environmental health.</i></p>	

2. Does your medical school offer community-facing courses or events regarding planetary health?	
3	The medical school offers community-facing courses or events at least once every year.
2	The medical school offers courses or events open to the community at least once per year, but they are not primarily created for a community audience.
1	The institution has offered community-facing courses or events, but the medical school was not involved in planning those courses or events.
0	The medical school has not offered such community-facing courses or events.

Score explanation: There are no free community-facing courses or events on planetary health offered by the McGill Faculty of Medicine and Health Sciences. Please see Question 5 in the “Interdisciplinary Research” section for conferences/symposiums on planetary health provided by the institution.

3. Does your medical school have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?

2	Yes, all students regularly receive communication updates dedicated to planetary health and/or sustainable healthcare.
1	Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates.
0	Students do not regularly receive communications about planetary health or sustainable healthcare.

Score explanation: The “What’s New” weekly newsletter sent to all McGill students contains a regularly-appearing section on sustainability. However, the included articles are only sometimes related to planetary health and/or sustainable healthcare.

4. Does the medical school offer continuing medical education (CME) courses that address planetary health and/or sustainable healthcare?

2	Yes, multiple in-person or online CME courses relating to planetary health and/or sustainable healthcare are offered, including at least one with a primary focus of planetary health.
1	Yes, one in-person or online CME course related to planetary health and/or sustainable healthcare is offered.
0	There are no CME courses on planetary health or sustainable healthcare topics.

Score explanation: While there are no CME courses dedicated to planetary health and/or sustainable healthcare, a weekly CME course with revolving topics includes a single 1-hour lecture titled “Environmental Impact of Hospitals” by Dr. Jean Zigby.

5. Do hospitals affiliated with your medical school have accessible educational materials for patients about environmental health exposures?

2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	No affiliated medical centers have accessible educational materials for patients.

Score explanation: No information about toxic exposures on <http://www.muhcpatienteducation.ca/>. An article entitled “Drug Use” at <https://www.jgh.ca/patients-visitors/health-tips/> does discuss the harms and mechanism of bioaccumulation of toxic pharmaceutical drugs in the environment, while another article entitled “Health & Safety at home” highlights the toxicity of certain cleaning products.

6. Do hospitals affiliated with your medical school have accessible educational materials for patients about climate change and health impacts?

2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	No affiliated hospitals have accessible educational materials for patients.

Score explanation: No information about climate change and its associated health impacts on <http://www.muhcpatienteducation.ca/> or <https://www.jgh.ca/patients-visitors/health-tips/>.

Section Total (6 out of 14)	6
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Are there additional community engagement and advocacy resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Support for Student-Led Planetary Health Initiatives

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

1. Does your institution offer support for medical students interested in enacting a sustainability initiative?	
2	Yes, the institution offers grants available to medical students for students to enact sustainability initiatives.
1	The medical school encourages sustainability QI projects (to fulfill clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, but there is no student funding available.
0	No, the institution does not offer opportunities or support for sustainability initiatives.
<p><i>Score explanation: The McGill Sustainability Projects Fund has a mandate to build a culture of sustainability on McGill campuses through the development and seed-funding of interdisciplinary projects for students of all faculties. Since 2010, \$10 million has been allocated towards 250+ projects, with 86% being student-staff collaborations. The Sustainability Projects Fund has an estimated yearly total of \$1,000,000 making it the largest fund of its kind in Canada.</i></p>	

2. Does your institution offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare?	
3*	The institution offers an explicit paid fellowship for medical students to do research related to planetary health and/or sustainable healthcare.
2	The institution offers paid research opportunities for students and planetary health/sustainable healthcare projects would be considered eligible.
1	There are unfunded research opportunities for students to perform research related to planetary health/sustainable healthcare.
0	There are no opportunities for students to receive funding for planetary health/sustainable healthcare research.
<p><i>Score explanation: There are no opportunities for students to receive funding for planetary health/sustainable healthcare research, nor is there an explicit paid fellowship. There are self-directed opportunities for medical students to do unfunded research in planetary health and/or sustainable practices but these are not facilitated by the faculty.</i></p>	

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

2	The medical school has a webpage with specific information related to planetary health or sustainable healthcare that includes up-to-date information on relevant initiatives and contact information of potential mentors.
1	There is a medical school webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information.
0	There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.

Score explanation: The McGill Office of Sustainability site provides a [webpage](#) listing all projects in the Sustainability Projects Fund (SPF), including sustainable healthcare. The McGill Office of Sustainability site equally provides a [webpage](#) with the list of members of the Advisory Council on Sustainability. However, there is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.

4. Does your medical school have funded, registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?

2	Yes, there is a funded student organization with faculty support at my medical school dedicated to planetary health or sustainability in healthcare.
1	Yes, there is a student organization at my medical school dedicated to planetary health or sustainability in healthcare but it lacks faculty support and/or funding.
0	No, there is not a student organization at my institution dedicated to planetary health or sustainability in healthcare.

Score explanation: There is a Sustainability Taskforce within the Government Affairs and Advocacy Committee (GAAC) of the McGill Medical Students' Society (MSS). However, the taskforce itself is not yet a funded nor registered student group.

5. Is there a student liaison representing sustainability interests who serves on a medical school or institutional decision-making council to advocate for sustainability best practices?

1	Yes, there is a student representative that serves on a medical school or institutional decision-making council.
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0	No, there is no such student representative.
<p><i>Score explanation: In the Fall 2020 General Assembly, the McGill Medical Students' Society (MSS) voted in favour of the Motion to Include the Role of Sustainability Representative in the VP Global Health Junior Position. The VP Global Health Junior sits on the General Council and Executive Council of the MSS.</i></p>	

6. In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	
1	Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.
1	Panels, speaker series, or similar events related to planetary health that have students as an intended audience.
1	Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.
1	Cultural arts events, installations or performances related to planetary health that have students as an intended audience.
1	Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.
1	Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students) that follow Leave No Trace principles.
<p><i>Score explanation:</i> Garden: 1) McGill Campus Crops: A collective working on urban agriculture initiatives to grow food on campus and provide students with space and opportunities to learn. They also promote discussion around issues of food politics and food security. 2) McGill Permaculture Club: A club that aims to increase awareness of permaculture and to grow student's appreciation of its benefits. Club activities include workshops, farm visits, discussion groups, movie screenings, and hands-on farm work. Panels, speaker series, or similar events: The McGill Sustainability Systems Initiative (MSSI) hosts an annual "Sustainability Research Symposium", a one-day symposium comprising speakers, panel discussions, student posters, and networking opportunities. There are also other regular talks, such as "Sustainability Webcasts" in October 2020 and "Workshop: Metrics for Sustainability Governance" in February 2020. The Department of Family Medicine hosted a panel in January 2021: "McGill Nurses for Planetary Health." The McGill Office of Sustainability hosted a speaker series titled "Climate and Sustainability Roadshow" throughout February 2021. Outdoors program:</p>	

The [McGill Outdoors Club](#) is a student club providing opportunities for hiking, camping, canoeing, skiing, snowboarding, cycling and climbing.

Section Total (6 out of 15)

6

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

Campus Sustainability

Section Overview: This section evaluates the support and engagement in sustainability initiatives by the medical school and/or 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 endeavor, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinizing 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 minimizing environmental impact.

https://www.mcgill.ca/sustainability/files/sustainability/mcgillclimatesustainability2025_-_reduced.pdf

1. Does your medical school and/or institution have an Office of Sustainability?	
3	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 and/or medical school.
2	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 medical school and/or hospital sustainability.
1	There are no salaried sustainability staff, but there is a sustainability task force or committee
0	There are no staff members or task force responsible for overseeing campus sustainability
<p><i>Score explanation: McGill University has an Office of Sustainability that provides the strategic guidance, support, and resources to transition McGill into an institutional model of sustainability for society. Specifically, the Office of Sustainability works in partnership with students, staff, and faculty to advance McGill's vision for sustainable research, education, connectivity, operations, and governance. However, there are no branches or appointed personnel of the Sustainability Office within medicine or at hospital sites. That being said, there are external, non-McGill affiliated organizations or teams that work with hospitals for environmental sustainability, albeit not every hospital site has this.</i></p>	

2. Does your medical school and/or institution have a stated goal of carbon neutrality by 2050?	
4*	The medical school is already carbon neutral.
3	Yes, there is a stated carbon neutrality goal and the medical school has a well-defined and adequate plan in place to achieve this goal.
2	Yes, there is a stated carbon neutrality goal, but the medical school has not created a plan to reach that goal or the plan is inadequate.
1	There is a CO2 emission reduction goal, but it is not one of carbon neutrality.

0	There is no stated goal for reduction of CO2 emissions.
<p><i>Score explanation: In 2020, McGill has expanded on its long-term targets to include achieving carbon neutrality by 2040 and attaining a Platinum sustainability rating by 2030. There are also goals to commit to becoming zerowaste by 2035. However, it is unclear how the medical school is integrating changes in order to meet these targets.</i></p>	

3. Do buildings/infrastructure used by the medical school for teaching (not including the hospital) utilize renewable energy?	
3*	Yes medical school buildings are 100% powered by renewable energy
2	Medical school buildings source >80% of energy needs from off-site and/or on-site renewable energy.
1	Medical school buildings source >20% of energy needs from off-site and/or on-site renewable energy.
0	Medical school buildings source <20% of energy needs from off-site and/or on-site renewable energy.
<p><i>Score explanation: According to the Energy Management Plan, as of 2016, all new buildings and buildings undergoing major renovation must use renewable energy as primary source of heating; fossil fuels cannot meet more than 25% of the heating requirements of the building; during their operation phase, fossil fuels can only make up to 20% of the building's total annual energy use.</i></p>	

4. Are sustainable building practices utilized for new and old buildings on the medical school campus, with design and construction of new buildings and remodeling of old buildings conforming to a published rating system or sustainable building code/guideline?	
3	Yes, sustainable building practices are utilized for new buildings on the medical school campus and the majority of old buildings have been retrofitted to be more sustainable.
2	Sustainable building practices are utilized for new buildings on the medical school campus, but most old buildings have not been retrofitted.
1	Sustainable building practices are inadequately or incompletely implemented for new buildings.
0	Sustainability is not considered in the construction of new buildings.
<p><i>Score explanation: One of the more recently constructed hospitals, the Glen, incorporated implementation of energy-efficient initiatives that resulted in 35% less energy consumption than for the average standard Canadian hospital. In addition, there were strategies implemented to reduce light pollution as a result of adapted lighting fixtures and an emphasis on natural light (via use of glass). Low-flow faucets were also utilized to decrease potable water consumption by at least 40% in relation</i></p>	

to comparable buildings. A bicycle path was also built linking to the City of Montreal's network and 397 parking spaces for cyclists. It was also reported that 79 charging stations were built for electric vehicles around the hospital. Other strategies also included decreasing heat island effect using large areas dedicated to green spaces (394 trees, 7500 perennials and 3750 shrubs that do not require any watering) as well as the white roofing's highly reflective materials.

Some of the older medical buildings on campus had reported trying to implement recycling and composting. However, it is unclear if there were any retrofitting of these older buildings to become more sustainable.

5. Has the medical school implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?

2	Yes, the medical school 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-utilized by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default.
1	The medical school has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised.
0	The medical school has not implemented strategies to encourage and provide environmentally-friendly transportation options.

Score explanation: There are efforts to address greenhouse gas emissions at McGill University (outlined by the McGill University Climate & Sustainability Strategy 2020-2025) by finalizing the Master Transportation Plan, increasing the bike parking capacity across campus, and encouraging the use of sustainable transportation for commuters. However, it is not clearly communicated how McGill's faculty of medicine implements strategies to encourage more sustainable forms of transportation.

6. Does your medical school have an organics recycling program (compost) and a conventional recycling program (aluminum/paper/plastic/glass)?

2	Yes, the medical school has both compost and recycling programs accessible to students and faculty.
1	The medical school has either recycling or compost programs accessible to students and faculty, but not both.
0	There is no compost or recycling program at the medical school.

Score explanation: In all buildings of the McGill University, waste collection is done in three streams : paper/cardboard, glass/metal/plastic, and garbage. The compost stream only exists in residence buildings and, since March 2019, on the ground floor of the McConnell Engineering Building as a pilot

project for hallway organic waste collection of the Department of Buildings and Grounds. Therefore, in the McIntyre Medical Sciences Building only recycling is accessible to students and faculty as of now.

7. Does the medical school apply sustainability criteria when making decisions about the campus food and beverage selections?

3	Yes, the medical school has adequate sustainability requirements for food and beverages and is engaged in efforts to increase food and beverage sustainability.
2	There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is engaged in efforts to increase food and beverage sustainability.
1	There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is not engaged in efforts to increase food and beverage sustainability.
0	There are no sustainability guidelines for food and beverages.

Score explanation: McGill Food and Dining Services has implemented a few sustainable initiatives, such as the Meatless Mondays (reduced price on vegetarian/vegan meals to encourage reducing meat consumption). McGill received a gold rating on the Stars (Sustainability Tracking Assessment and Rating System) with AASHE (Association for the Advancement of Sustainability in Higher Education). The Student Housing and Hospitality Services received full marks in the "sustainable dining" category. Half of all food on the McGill campuses is local (grown, raised or processed in Quebec or 500km from the downtown campus). The Mac Farm of the MacDonald campus is the university's largest supplier of in-season produce.

8. Does the medical school or associated institution apply sustainability criteria when making decisions about supply procurement?

3	Yes, the medical school has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement.
2	There are sustainability guidelines for supply procurement, but they are insufficient or optional. The medical school is engaged in efforts to increase sustainability of procurement.
1	There are sustainability guidelines for supply procurement, but they are insufficient or optional. The medical school is not engaged in efforts to increase sustainability of procurement.
0	There are no sustainability guidelines for supply procurement.

Score explanation: In the McGill University's [Supplier Code of Conduct](#), the third section pertains to Environmental Principles for Suppliers. The university expects its suppliers to abide by environmental regulations and to mitigate the negative environmental impacts of their operations. As per the [McGill University Guidelines for the Purchase and Use of Printing Paper and Printing Services](#), the McGill University Printing Services are expected to apply the 4-Rs (rethink, reduce, reuse, and recycle). More

specific guidelines include the strict use of 100% post-consumer recycled photocopy band and the provision of 100% post-consumer recycled exam booklets. No other specific sustainable guidelines for procurement were found.

As a result of the 2013-2018 Sustainable Procurement Strategic Plan, the university now gives a 6-hour training in Sustainable Procurement to all of its Procurement Services staff. The course “Sustainable Purchasing 101” is also available to all McGill staff members.

9. Are there sustainability requirements or guidelines for events hosted at the medical school?

2	Every event hosted at the medical school must abide by sustainability criteria.
1	The medical school strongly recommends or incentivizes sustainability measures, but they are not required.
0	There are no sustainability guidelines for medical school events.

Score explanation: The Medical Students’ Society (MSS) has adopted the [MSS Guidelines for Sustainable Events](#). This was a student-led initiative that does not bind clubs to abide by the guidelines, but incentivises them to do so by reducing funding for clubs who disregard these sustainability guidelines.

10. Does your medical school have programs and initiatives to assist with making lab spaces more environmentally sustainable?

2	Yes, the medical school has programs and initiatives to assist with making lab spaces more environmentally sustainable.
1	There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives.
0	There are no efforts at the medical school to make lab spaces more sustainable.

Score explanation:

In February 2020, the [McGill-wide Green Labs Initiative](#) was launched and is still ongoing. The goals of this project are to initiate a sustainability culture in McGill laboratories by implementing sustainable practices in the labs and educating personnel on those practices. So far, recycling bins with signs have been distributed across labs. This initiative includes many of the labs affiliated with the medical school, even including off-campus labs of the McGill University Health Center at the Glen Site and MGH.

McGill also has a [Sustainable Labs Guide for Researchers](#) that was developed by a Sustainable Labs Working Group and approved by the University Lab Safety Committee in October 2016 as part of “Action 3 - Sustainable labs” of the McGill’s [Priority Actions](#) for the [2020-2025 Climate and Sustainability Strategy](#).

11. Does your institution's endowment portfolio investments include fossil-fuel companies?	
4	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.
3	No, the institution is entirely divested from fossil fuels.
2	The institution has partially divested from fossil-fuel companies.
1	The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment.
0	Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.
<p><i>Score explanation:</i> On April 23, 2020, McGill's Board of Governors approved an action plan aiming to reduce the carbon footprint of its endowment investments. The approach consists of divesting from high carbon intensive companies (e.g. fossil fuel companies), and is expected to render McGill's equity portfolio at least 33% less carbon intensive than the benchmark by 2025. For the 2020 fiscal year, the McGill Investment Pool's Equity Portfolio was less carbon intensive than the benchmark by 19.4% (see Report on Endowment Performance 2019-2020).</p> <p>Divest McGill, a student-led environmental justice campaign, has been mobilizing for divestment at McGill since 2012. This group is advocating for complete and transparent divestment from the top 200 fossil-fuel intensive companies.</p>	

Section Total (18 out of 29)	18
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Are there additional sustainability resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Grading

Section Overview

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

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

Planetary Health Grades for the McGill Faculty of Medicine and Health Sciences

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

Section	Raw Score	Grade
Planetary Health Curriculum	29 / 58 = 50%	C
Interdisciplinary Research	9 / 19 = 47%	C
Community Outreach and Advocacy	6 / 14 = 43%	C-
Support for Student-led Planetary Health Initiatives	6 / 15 = 40%	C-
Campus Sustainability	18 / 29 = 62%	B-
Institutional Grade	49%	C