

Planetary Health Report Card (Physiotherapy): Anglia Ruskin University MSc Physiotherapy (Pre-Reg)



2024-2025 Contributing Team:

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Summary of Findings

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Overall Grade

Curriculum D-There is currently minimal education on sustainable healthcare practices integrated throughout the physiotherapy program. Most planetary health topics are not covered in the core curriculum. **Positive Elements:** • Students are given the option to have second-hand uniforms to promote sustainability. • During a neurological rehabilitation practical, students were asked to label pads for reuse to reduce waste. • Non-pharmaceutical management and ways to reduce over-investigation are encouraged, though the sustainability link is not always explicit. Areas Needing Improvement: Climate change impacts on health and physiotherapy practice are not adequately covered. Environmental health issues, including air pollution and environmental toxins, are minimally 0 addressed. • Sustainable clinical practices and strategies to reduce the carbon footprint of physiotherapy are not well integrated. 0 There is no specific training on discussing environmental health impacts with patients. • The curriculum lacks content on the relationship between climate change, health inequalities, and physiotherapy outcomes. Institutional Support: Anglia Ruskin University has created paid internship roles to complete the Planetary Health Report 0 Card, indicating some institutional commitment to improvement. However, there is no designated faculty member or team responsible for promoting sustainable 0 healthcare practices throughout the curriculum. Recommendations: • Better integrate planetary health topics throughout the core curriculum. Provide more explicit links between existing content and sustainability/environmental health. 0 Introduce specific training on environmental history-taking and patient communication about 0 climate change. • Introduce mini sustainability audits for early placements and encourage sustainability-based Quality Improvement projects. Designate a faculty member or team to oversee curriculum integration of planetary health topics. 0 • Deliver sustainability and planetary health CPD to all lecturing staff, to improve buy-in and expertise.

- Overall:
 - Many of the core principles of Physiotherapy that are taught in the course could be credited if their co-benefits to patients and the environment were highlighted to students.

- While there are some positive elements, the audit reveals significant room for improvement in integrating planetary health and sustainable healthcare practices into the MSc Physiotherapy curriculum at Anglia Ruskin University.
- However, the institutional level of support appears to be very strong and should help drive rapid improvement if it is maintained

Interdisciplinary Research

B+

- Anglia Ruskin University currently has researchers dedicated to sustainability, but they are not directly affiliated with any healthcare course. There is an institute named the 'Global Sustainability Institute', which works to research areas such as policy making and technological changes. The university additionally has an interdisciplinary research department called 'Sustainable Futures', which works with stakeholders at the regional level, all the way to the international level to help build environmentally just societies. Anglia Ruskin University also strives to highlight the voices of communities disproportionately affected by climate change, as the Global Sustainability Institute consults members of the community regarding the research taking place at the university. Currently, the university has 2 websites centred around planetary health and sustainability research; one about the Global Sustainability Institute and the other named 'Sustainable Futures', both being easy to navigate and accessible. The university has also been at the forefront of climate centred conferences and symposiums, proven by its hosting of the 'Net Zero & Climate Resilience Summit 2024', among others.
- However, while Anglia Ruskin University is well integrated in planetary health research, there are improvements that could be made. For example, it is not yet part of any national or international planetary health organisations, but is in the process of joining some, e.g. the Planetary and Population Health Research Group. There has also not yet been any joining of the course on collaborative research into healthcare and planetary health, so by improving this, the university will be impressively involved in interdisciplinary research.

Community Outreach and Advocacy

- Anglia Ruskin University (ARU) demonstrates a commendable commitment to community outreach and advocacy efforts for Planetary Health. Through partnerships with community organisations like the Big Green Internet Project and the Wilderness Foundation, ARU promotes environmental conservation, student well-being, and community engagement. Additionally, ARU's Global Sustainability Institute (GSI) offers public-facing courses, events, and resources, including postgraduate programs on sustainability and regular seminars, workshops, and exhibitions to educate and inspire action. ARU actively communicates planetary health updates through newsletters and news articles while promoting sustainable practices with incentives and tips for students and staff. Moreover, ARU collaborates with affiliated hospitals, such as the Mid and South Essex NHS Foundation Trust, to ensure healthcare professionals receive ongoing education on sustainability.
- However, gaps remain in patient-facing educational materials on environmental health exposures and climate change impacts, highlighting areas for improvement in extending planetary health advocacy beyond academic and professional audiences. Ways to improve include finding ways to teach patients on environmental health impacts and health exposures in forms of leaflets, posters and surveys.

Support for Student-Led Initiatives

• Anglia Ruskin University displays a notable amount of initiatives and programmes happening across the campuses. There are excellent initiatives, such as the Peer Wellbeing Mentors' partnerships with 'Earth & Mind' and 'The Wilderness Foundation', and web pages providing resources and information. Furthermore, an adaptation of the PHRC, known as the 'Green Heron Audit' is progressively continuing to be implemented in courses like Physiotherapy, Occupational Health, Public Health, and now Medicine.

B

R

However, there is limited visibility and advocacy of existing initiatives, making it harder for students to engage. This lack of consistent promotion means that many initiatives and opportunities remain underutilised, requiring students to take significant initiative to seek them out. While research opportunities for students are present, they are somewhat limited and not widely accessible.

• Many of the existing initiatives stem from the wider university and its campuses rather than the Chelmsford campus, and better support for student-led initiatives specific to the Chelmsford campus is needed. To address these gaps, the University should increase support for student-led initiatives on its campus and improve promotion of existing opportunities through expanding research programmes and encouraging interprofessional advocacy for planetary health.

Campus Sustainability

C+

- Anglia Ruskin University has many sustainable actions put in place by the Sustainability Team and aims to be fully Carbon-Zero by 2045. The University is completely divested from Fossil Fuels, uses zero-carbon energy, and is mindful about sustainability within new buildings and refurbishments. There are extensive recycling facilities onsite, including food waste and an onsite 'Womery'. Notable policies include ARU's 'Sustainable Food Policy' and 'Responsible Procurement Policy' which both have mandatory points about sustainability.
- Recommendations: Improvements would include being more ambitious with reducing ARU's carbon footprint, and aiming to make lab spaces more sustainable by applying for LEAF accreditation which the University plans to do. Additionally, mandatory sustainability guidelines could be put in place for events hosted in ARU spaces.

Statement of Purpose

Planetary health is human health.

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

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

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

Definitions & Other Considerations

Definitions:

- Planetary Health: is described by the Planetary Health Alliance as "the health of human civilisation and the state of the natural systems on which it depends." For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional 'environmental health' examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of health professional education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term "planetary health" to satisfy the metric.
- Sustainable Healthcare: As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- Education for Sustainable Healthcare (ESH): is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare and 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 a doctor's duty to protect and promote health is shaped by the dependence of human health on the local and global environment.
- Physiotherapy School/Department vs. Institution: When "Physiotherapy school" is specified in the report card, this only refers to curriculum and resources offered by the School/department of physiotherapy 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 Physiotherapy 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: This is a series of questions students are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.
- Elective: The word "elective" refers to an optional course or lecture series that a student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Core Curriculum:** This refers to taught material that is delivered to the entire cohort of students in one year.
- Clerkship / Outreach: This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.
- Clinical rotation: This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).
- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.
- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.
- Climate justice: The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.

- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to the historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.
- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.
- Low socioeconomic status (SES): An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.
- Low and Middle-Income Countries (LMIC): Countries that have lower degrees of economic affluence.
- Anthropogenic: Created through human activity
- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

Other considerations:

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

Completed in 2022 a <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 physiotherapy school curriculum. Today's physiotherapy students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that physiotherapy 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 physiotherapy school's core curriculum.

Curriculum: General

1.1. Does the physiotherapy curriculum offer elective (student-selected) courses or modules specifically focused on sustainable healthcare practices or environmental physiotherapy?

Yes, the physiotherapy school has offered more than one elective whose primary focus is ESH/planetary health in the past year. (3 points)

Yes, the physiotherapy school has offered one elective whose primary focus is ESH/planetary health in the past year. (2 points)

The physiotherapy school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health. (1 point)

No, the physiotherapy 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:

0

Reason for score:

No additional courses or content made available or signposted.

Recommendation:

Signpost students to sustainability workshops available at ARU and the document below. The resource needs updating by ARU Global Sustainability Institute and when checked no workshops were scheduled (27/6/24) but these may happen regularly.

Students could be signposted to the <u>Ruskin Modules</u> and helped with the signup process.

World Health Organisation (WHO) courses about climate change and healthcare could be recommended

The course could include some pre-reading about Sustainability in Healthcare or recommend watching the Health Emergency of Climate Change from the Royal Society of medicine

Resources / Links: <u>ARU education for Sustainability HEMS Guide</u> *EfS Workshops and Events at ARU* (*EfS* = *Education for Sustainability*)

<u>WHO - Environment, climate change and health for practitioners and actors guiding</u> policy change

WHO - Air pollution and health: an introduction for health workers

<u>Health Emergency of Climate Change 10 part series on youtube from the Royal Society of</u> <u>medicine</u>

1.2. Does the curriculum address the health risks of extreme heat from climate change on patient care, particularly for vulnerable populations that physiotherapists commonly treat (e.g. children, elderly, athletes)?

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)

Reason for score:

Score Assigned:

This topic was not covered.

Recommendation:

The environmental aspect of the ICF, Biopsychosocial model and ageing teaching provide an opportunity to introduce various environmental factors such as heat.

0

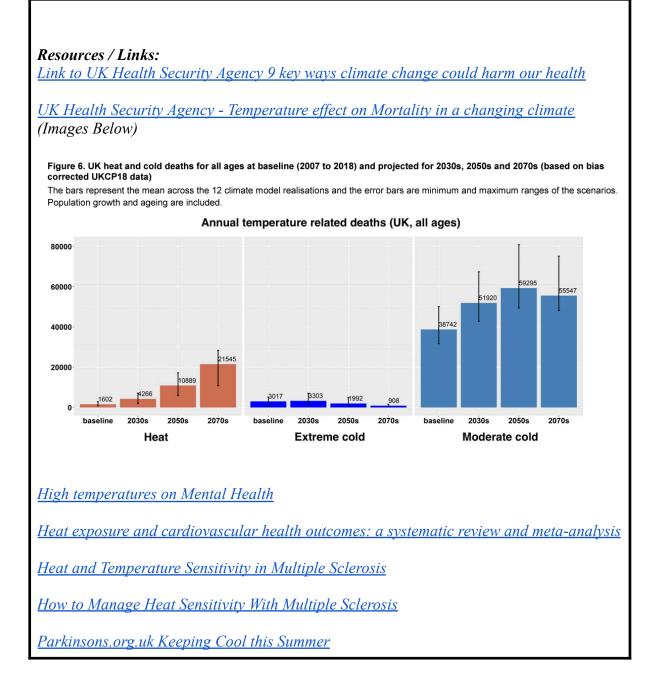
Resources or discussions could be based around the UK Health Security Agency 9 key ways climate change could harm our health.

Highlight the link between Cardiorespiratory health and extreme heat on slide 7 of MH - Delirium.pptx

Links could be made between climate change and mental health. Ask: how does hot weather change mental health conditions? What does this mean for climate change?

Neurological conditions covered in the neuro unit such as MS and Parkinsons that are affected by climate provide an opportunity to highlight the effect of heat and climate change on various conditions that a physiotherapist may come across and be involved in treating.

Wet Bulb temperature could be discussed in terms of athletic and vulnerable populations as temperature and humidity are a likely consequence of climate change.

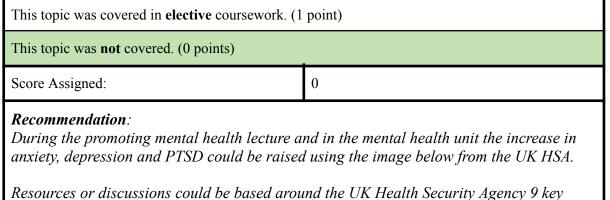


Curriculum: Health Effects of Climate Change

1.3. Is there content on how extreme weather events affect physiotherapy practice and service delivery, for example, disaster response and rehabilitation following these events?

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

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



ways climate change could harm our health.

The environmental aspect of the ICF & Biopsychosocial model teaching provides opportunities to introduce various environmental factors such as extreme weather events.

The impact of Heatwaves and floods could be linked to various conditions that Physiotherapists will encounter such as Arthritis, MSK conditions and reductions in activity by vulnerable populations. These are summarised in the short article from the CSP below.

Resources / Links:

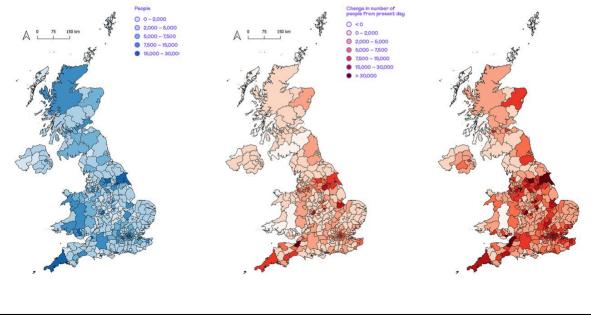
CSP - The role of physiotherapy in climate change mitigation

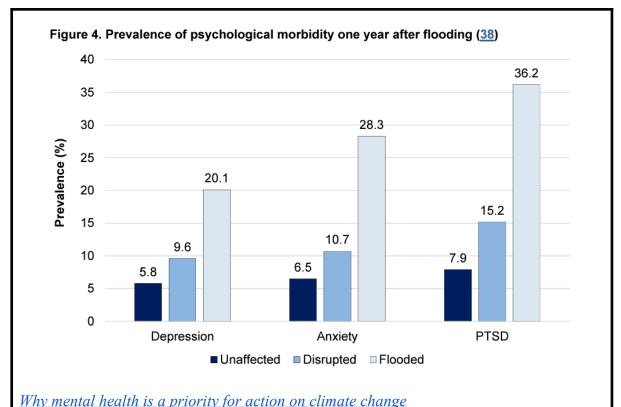
Link to UK Health Security Agency 9 key ways climate change could harm our health

UK Health Security Agency - Climate Change, flooding and public health (images below)

Figure 2. Change in number of people at risk from flooding

The left-hand graph shows present day risk (using 2021 as a baseline). The centre graph shows projected number of people at risk in 2050s on a pathway to 2°C global warming by the end of the century. The right-hand graph shows projected number of people at risk in 2080s on a pathway to 4°C global warming by the end of the century (produced by CCC (10) using data from (9)).





1.4. Does the curriculum cover how changing patterns of infectious diseases due to climate change might impact physiotherapy practice and patient management?

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:

Reason for score:

This topic was not covered.

Recommendation:

During teaching of Red Flags for MSK conditions some of the climate change caused increases in infectious diseases could be highlighted.

0

The environmental aspect of the ICF & Biopsychosocial model teaching provides opportunities to introduce various environmental factors such as infectious disease patterns.

Resources or discussions could be based around the UK Health Security Agency 9 key ways climate change could harm our health.

Resources / Links:

Link to UK Health Security Agency 9 key ways climate change could harm our health

<u>UK Health Security Agency - Effect of climate change infectious diseases in the UK</u>

The table below shows a range of climate-sensitive infectious diseases assessed to be currently or likely to become of public health concern in the UK. Taken from The UK HSA document above.

Table 1. Transmission mode, total cost and symptoms and severity of infectious diseases in the UK (excluding vector-borne diseases) considered in this chapter. Definitions of terms used in column 3 are given below the table.

Type of infection	Disease or pathogen	Transmission mode	Total cost (median £million, 95% Cls) in 2018 (<u>26</u>)	Symptoms and severity
Virus	Adenovirus	Contact, bathing, airborne, surface	£48.7 (£12.0 to £138.2)	Causes fever, upper respiratory infections, conjunctivitis, swollen glands and sore throat; species F causes gastroenteritis
Virus	Astrovirus	Contact, food, surface, water	£10 (£2.2 to £31.6)	Associated with acute diarrhoea in young children. Symptoms include diarrhoea, vomiting, and stomach cramps
Virus	Influenza	Airborne, surface	Not included in (26)	Sudden onset of fever, headache, cough, muscle and joint pain, severe unwell feeling, sore throat and runny nose. Most people recover within 7 days, but severe illness or death occurs in high-risk groups
Virus	Norovirus	Contact, water, food, airborne, surface	£1,678.2 (£238.6 to £1,943.6)	Highly infectious. Rapid onset of nausea, vomiting, diarrhoea, fever, headache, dehydration and aches. Most people recover within 1 to 3 days
Virus	Respiratory syncytical virus (RSV)	Airborne, surface	Not included in (26)	Nasal congestion, sneezing, cough and sometimes fever. Small numbers develop more severe illness
Virus	Rotavirus	Contact, water, food, surface	£8.5 (£2.1 to £23.5)	Highly infectious in children, with symptoms include vomiting, watery diarrhoea, and fever which last 1 to 2 days. Incidence has reduced since introduction of vaccination in 2013
Bacteria	Sapovirus	Contact	£169.5 (£112.4 to £251.7)	Similar to norovirus

Type of infection	Disease or pathogen	Transmission mode	Total cost (median £million, 95% Cls) in 2018 (<u>26</u>)	Symptoms and severity
Bacteria	Shigellosis	Food, water, contact	£12.3 (£0.8 to £38.3)	Diarrhoea (sometimes bloody), fever, nausea and stomach cramps which may last for around 7 days. Severity depends on serotype
Bacteria	STEC/VTEC	Food, water, zoonotic, surface, contact	£3.9 (£3.0 to £4.6)	Mild to severe diarrhoea (often bloody) stomach cramps and vomiting. In England 5% to 14% of O157 cases develop haemolytic uremic syndrome with kidney damage
Bacteria	Vibriosis	Food, bathing	Not included in (26)	Non-cholera vibrios cause a self-limiting diarrhoea. Eye, ear, and wound infection and blood poisoning are also possible
Bacteria	Yersinia enterocolitica	Food, water	Not included in (26)	Symptoms vary with age and include fever, abdominal pain, and diarrhoea are common. Symptoms may last 1 to 3 weeks but complications are rare
Parasite	Cyclospora	Food, water	Not included in (26)	Diarrhoea, loss of appetite and weight loss, stomach cramps and muscle aches. Self-limiting in individuals with healthy immune systems
Parasite	Cryptosporidiosis	Food, water, zoonotic, bathing	£2.1 (£0.3 to £15.3)	Diarrhoea, abdominal pain and less frequently fever, nausea and vomiting. Self-limiting but more severe illness occurs in individuals with impaired immunity
Parasite	Giardiasis	Food, water, zoonotic, contact, bathing, surface	£75.0 (£11.6 to £406.0)	Diarrhoea with bloating, pain or stomach cramps

1.5. Does the program address the relationship between climate change, air pollution, respiratory health, and physiotherapy interventions?

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:

0

Reason for score:

This topic was not covered.

Recommendation:

In the Introduction to Cardiorespiratory System.pptx lecture add information regarding environmental causes of chronic respiratory diseases (e.g. Air pollution)

In the presentations **Respiratory Pathologies.pptx** and **Updated Anatomy of the Respiratory and** Cardiac systems.pptx Links between air pollution, allergies and wildfires caused by climate change could be addressed.

On the presentation Ax - *Sx*, *Ox*, *Ausc.pptx links between air pollution and industrial toxins could be made more explicit on slide* 15.

The environmental aspect of the ICF & Biopsychosocial model teaching provides opportunities to introduce various environmental factors such as air pollution and its effect on respiratory health.

Resources or discussions could be based around the UK Health Security Agency 9 key ways climate change could harm our health.

During the Neuro teaching the effect of climate change and air pollution could be highlighted in regards to patients with decreased respiratory function due to SCI or Neurological conditions.

Resources / Links:

Link to UK Health Security Agency 9 key ways climate change could harm our health:

<u>UK Health Security Agency Impacts of climate change and policy on air pollution and</u> <u>human health</u>

<u>UK Health Security Agency Outdoor airborne allergic pollen and fungal spores</u>

Air pollution and chronic airway diseases: what should people know and do?

Mother suing government wants apology over daughter's pollution-linked death



Ella Adoo-Kissi-Debrah died in February 2013 (Handout/PA)

Health matters: air pollution

UK Health Security Agency - Air Pollution/Allergies/Wildfires

00 to

eaths

<u>Health matters: air pollution</u> Source of images below (Public Health England)

Scale of the problem

It is estimated that **long-term** exposure to man-made air pollution in the UK has an annual effect equivalent to: Over the following 18 years a 1 µg/m³ reduction in fine particulate air pollution in England could prevent around:

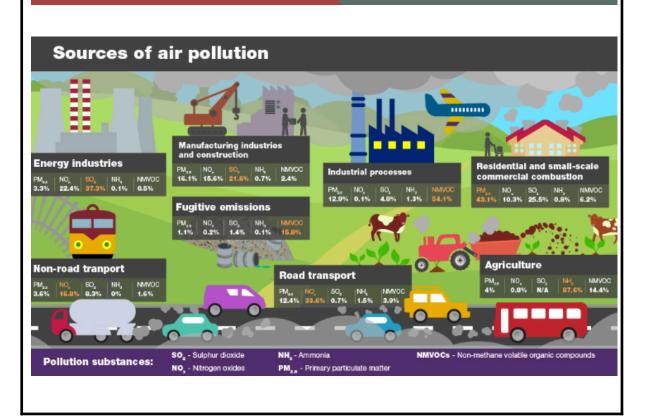


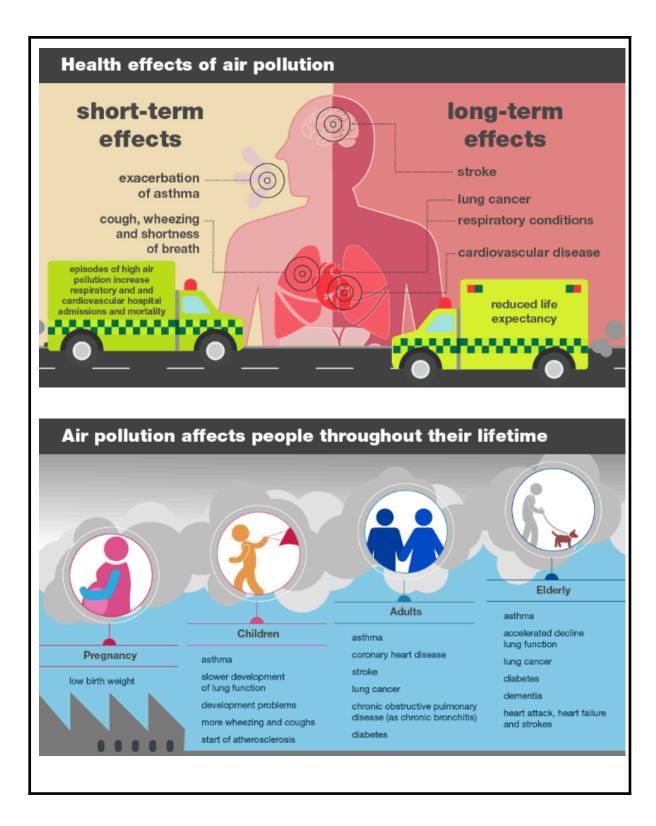
50,900 cases of coronary heart disease 16,500 strokes



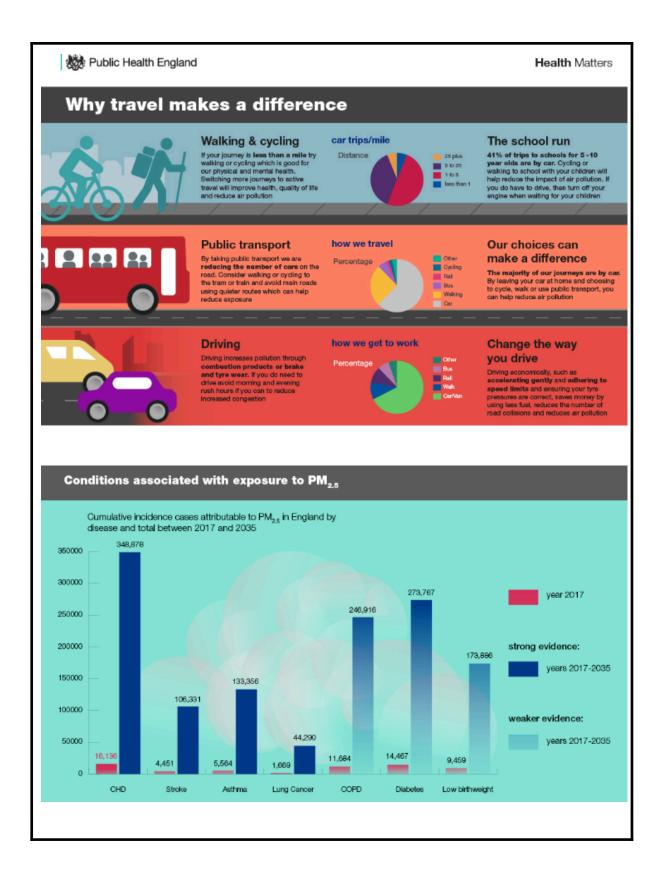
9,300 cases of asthma

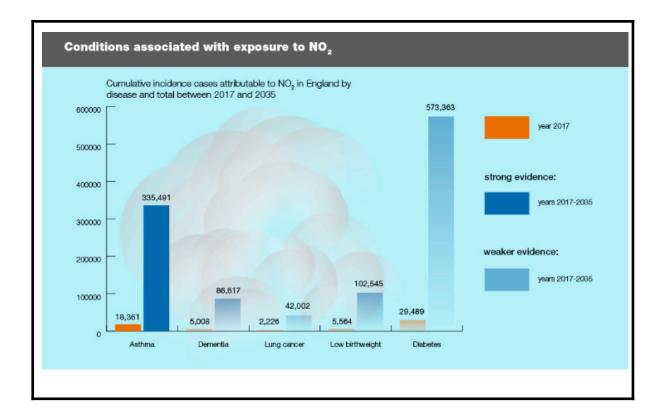
4,200 lung cancers











1.6. Is there content on how climate change and increased heat affect cardiovascular health, and how this impacts physiotherapy assessment and treatment planning?

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:

Reason for score:

This topic was not covered.

Recommendation:

The environmental aspect of the ICF & Biopsychosocial model teaching provides opportunities to introduce various environmental factors such as cardiovascular effects of climate change.

0

Resources or discussions could be based around the UK Health Security Agency 9 key ways climate change could harm our health.

Resources / Links:

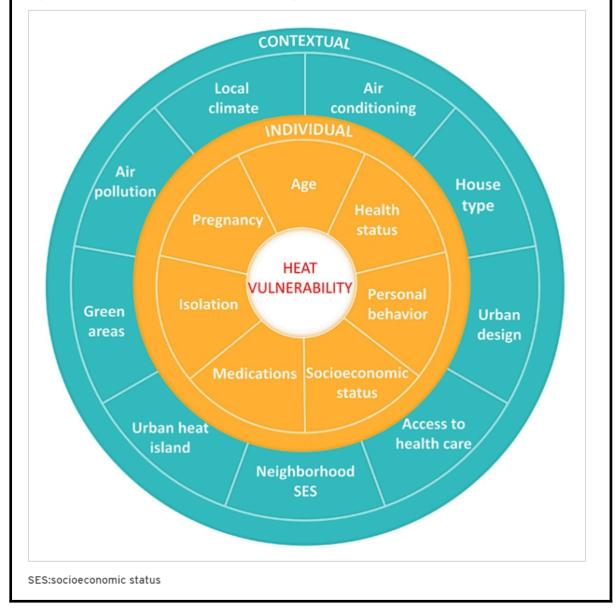
Link to UK Health Security Agency 9 key ways climate change could harm our health:

UK Health Security Agency - Temperature effect on Mortality in a changing climate



European Society of Cardiology - Climate change and cardiovascular disease – the impact of heat and heat-health action plans (Image below)

Figure 1. Individual and contextual factors influencing vulnerability to heat.



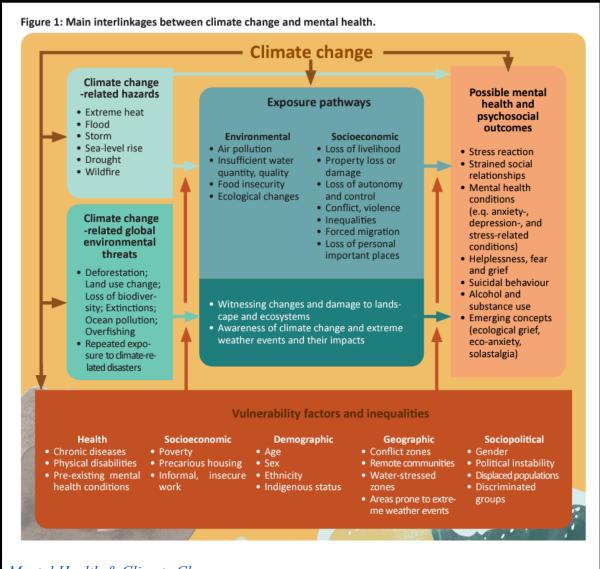
1.7. Does the curriculum address climate change's potential mental health impacts on patients and how this might affect physiotherapy outcomes?

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:	0					
Reason for score: This topic was not covered.						
Recommendation : Provide additional reading around this topic in the promoting good mental health in the workplace lecture. Promoting good mental health in the workplace 2024.pptx						
During the MH for Physio.pptx lecture pose the question: what is Solastalgia? Solastalgia is the distress that is produced by environmental change impacting on people while they are directly connected to their home environment.						
Solastalgia is the distress that is produced by environmental change impacting on people while they are directly connected to their home environment.						
Explain climate anxiety is real and growing, plus they are likely to come across people with PTSD caused by climate change (e.g. flooding or climate induced migration)						
Highlight the importance of accessible green spaces for the treatment of MSK, Chronic Pain and Neurological conditions such as Nonspecific Back pain or Fibromyalgia and the co-benefits to mental health and pain.						
Resources / Links: <u>Climate change likely to aggravate brain conditions</u>						
Paper - Exposure to greenspaces could reduce the high global burden of pain						
<u>Solastalgia</u>						
<u>Mental Health and Climate Change WHO</u> (Image below)						



Mental Health & Climate Change

1.8. Does the program integrate discussions on the importance of food and water security and environmental factors in patient care and recovery addressing how these could be impacted by climate change?

0

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:

Reason for score:

This topic was not covered.

Recommendation:

The environmental aspect of the ICF & Biopsychosocial model teaching provides opportunities to introduce various environmental factors such as food security and the importance of a healthy diet to help in the healing process.

Show and explain the diagram below from the UK HSA that explains the impact of climate change on the UK food system.

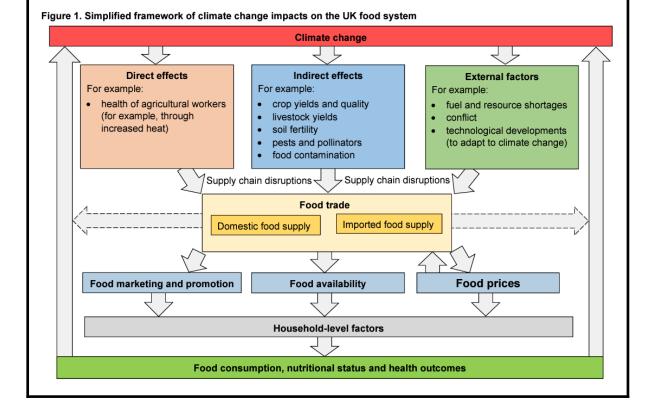
Physiotherapists need to be aware of the effects of malnutrition for example stunting and wasting. The effect of increased food insecurity due to climate change could cause malnutrition particularly in children, so this could be highlighted. This will disproportionately affect low income families as food prices increase.

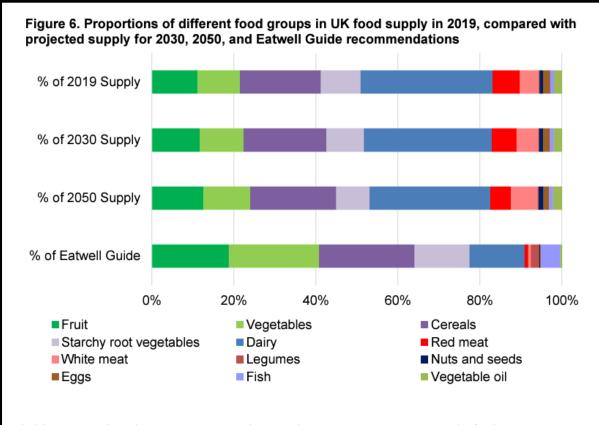
The effect of food insecurity could also be raised when discussing these conditions in the *MH* for *Physio.pptx* presentation and linked to the likely impacts on food security caused by climate change.

Resources / Links:

The association between food insecurity and mental health during the COVID-19 pandemic

UK Health Security Agency Climate Change and Food Supply





Children raised under UK austerity shorter than European peers, study finds

1.9. Does your physiotherapy school curriculum address how patterns of colonialism, extractivism, economic exploitation and marginalization are responsible for producing climate change resulting in an outsized impact on marginalized populations (e.g. low SES, women, communities of color, 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:

Reason for score:

This topic was not covered.

Recommendation:

The History, philosophy & Structure of health and social care.pptx lecture could provide opportunities to link health inequalities on certain groups and the slide on global healthcare provision could be discussed in a climate change context. This could be linked to the NHS Long term Plan and its focus on reducing inequality in healthcare.

0

In either the Respiratory Pathologies.pptx or the Resp Handbook .docx the link between health inequalities and lung disease could be made along with the discussions about how climate change will increase air pollution and that the solutions to climate change such as electric cars will reduce it.

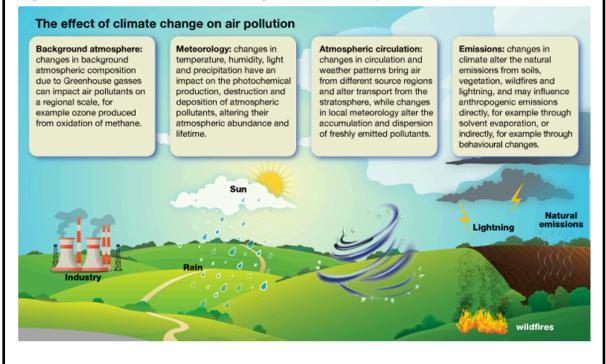
See question 8 above for a disproportionate impact on healthy eating due to food insecurity.

Resources / Links: <u>NHS Long Term Plan</u>

Asthma and lung UK Briefing: Health Inequities and lung disease

Impacts of climate change and policy on air pollution and human health UK HSA

Figure 1b. The effects of climate change on ambient air pollution



1.10. Does your physiotherapy school curriculum address how global climate change impacts might affect physiotherapy practice in different regions, including potential changes in patient demographics due to climate migration?

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:

0

Reason for score:

This topic was not covered.

Recommendation:

The History, philosophy & Structure of health and social care.pptx lecture could provide opportunities to link health inequalities on certain groups and the slide on global healthcare provision could be discussed in a climate change context. This could be linked to the NHS Long term Plan and its focus on reducing inequality in healthcare.

During the MH for Physio.pptx presentation the disruption to social ties and their impact on mental health outcomes could be discussed in terms of patients that have become climate refugees, that physio will have to treat going forward in their careers.

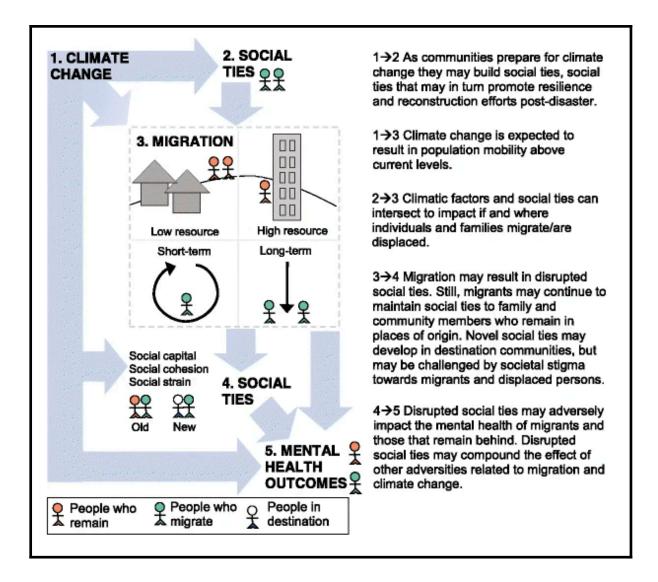
Highlight that physiotherapists may work in a variety of non-standard settings such as immigration detention centres, where they may come across climate migrants. Also highlight that students could work across the world in future, so depending on where they work climate change will have an unequal impact.

Resources / Links:

<u>NHS Long Term Plan</u>

Working as a physiotherapist outside Europe

The centrality of social ties to climate migration and mental health



1.11. Does the curriculum address the potential impacts of environmental toxins on patient health and rehabilitation, particularly in pediatric or neurological physiotherapy?

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

Reason for score:

Slide 8 of Ageing.pptx links environmental factors to health in older age. Slide 14 of the Load - Carriability Model.pptx presentation highlights the impact of pollution as an environmental stressor. In the social History section of Resp Handbook .docx it states "Occupation – some jobs increase chance of lung disease eg. Factories, miners, asbestos exposure".

Ax - *Sx*, *Ox*, *Ausc.pptx Slide* 15 - *When addressing social history it asks about work/ previous work and risk factors.*

Recommendation:

Add a video explaining how environmental toxins interfere with muscle contractions alongside the other muscular contractions videos

In the Self directed learning - Pain section a paper addressing environmental factors in chronic pain could be included (see below for an example)

In the Neurological teaching highlight the effects of industry related environmental toxins and their potential relationship with conditions such as Parkinsons and Alzheimers.

In cardiorespiratory teaching the industrial sources of air pollution could be addressed and highlighted.

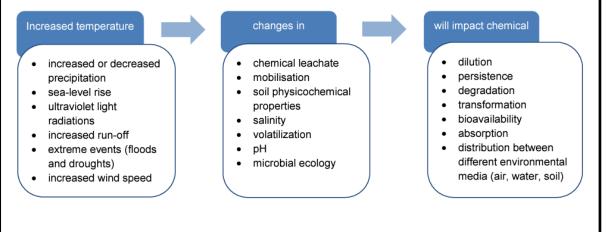
Resources / Links:

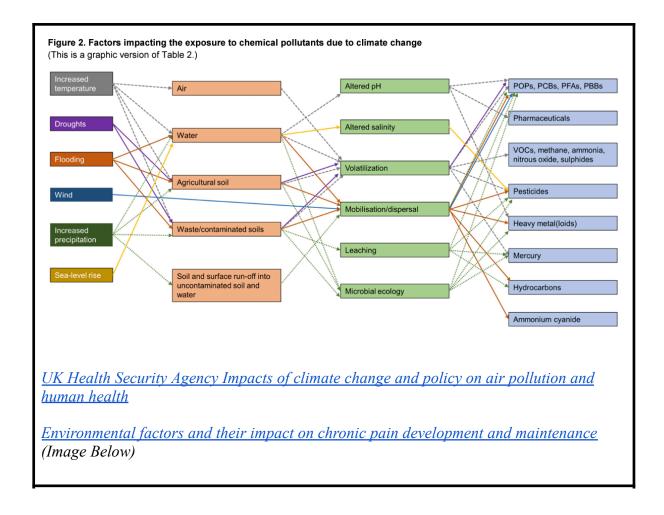
Example video Environmental Toxins and Muscle contraction

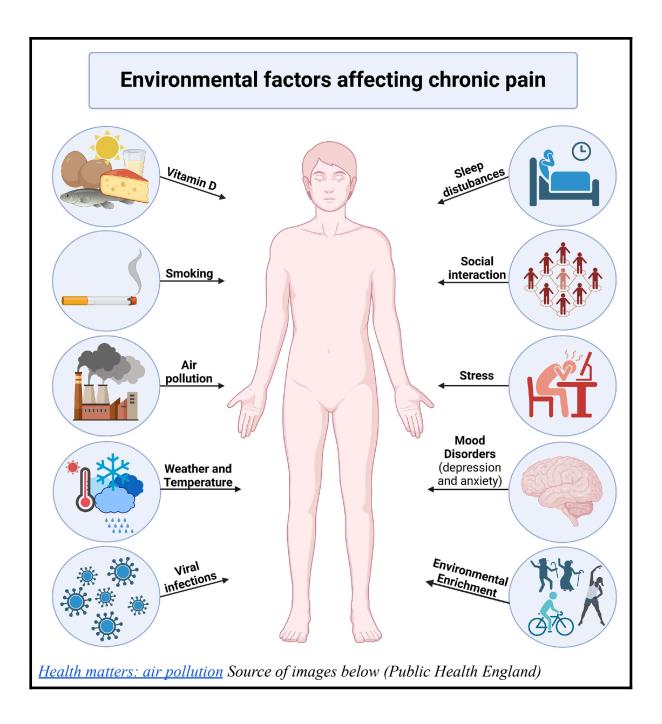
Exposure to environmental toxins may be root of rise in neurological disorders

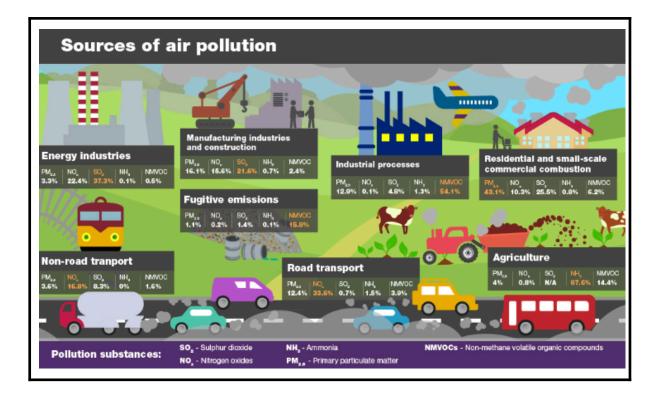
<u>UK Health Security Agency Impact of climate change on human exposure to chemicals in</u> the UK

Figure 1. Flow diagram summarising how climate change may impact on chemical fate in the environment









1.12. Does your physiotherapy school curriculum incorporate local environmental health issues into case studies, lectures or practical sessions?

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:

0

Reason for score:

This topic was not covered.

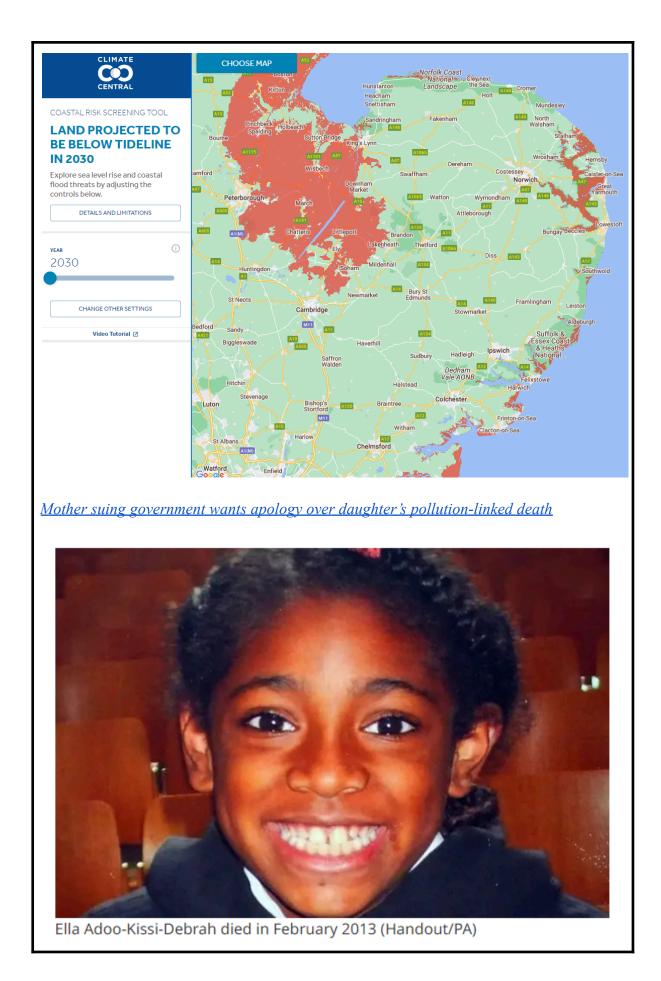
Recommendation:

Show students the Climate Central coastal flooding interactive map for the region, highlighting local areas likely to be affected by 2030 (Cambridge, Peterborough, Southend and Jaywick for example) this could be done in the HCPC standards & public health.pptx lecture.

Have a discussion in the respiratory lectures highlighting the story in the Chelmsford Weekly news about the death of a Young girl in East London that was caused by air pollution and link this to the increase in air pollution linked to climate change.

Resources / Links:

<u>Climate Central Coastal Risk Screening Tool</u> (Screenshot below)



1.13. To what extent does your physiotherapy school emphasize the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?

Indigenous knowledge and value systems are integrated throughout the physiotherapy school's planetary health education (3 points)

Indigenous knowledge and value systems as essential components of planetary health solutions are included briefly in the core curriculum. (2 points)

Indigenous knowledge and value systems as essential components of planetary health solutions are included in elective coursework. (1 point)

This topic was not covered. (0 points)

Score Assigned:

0

Reason for score:

This topic was not covered.

Recommendation:

Ask, can ideas outside Western Medicine provide ideas for more sustainable healthcare practices? Link this to nature based therapies.

Include content about indigenous populations' sustainable relationship with the environment and how this can be used to adapt western practice in for example in areas such as agriculture, by adopting regenerative farming practice.

Resources / Links: Medicine Ways: Traditional Healers and Healing

Regenerative Farming practice

<u>A range of nature based physiotherapy publications</u>

1.14. Does your physiotherapy school curriculum address how environmental factors disproportionately affect marginalized populations such as those with low SES, women, communities of color, children, homeless populations, Indigenous populations, and older adults, and how physiotherapists can address this in their practice?

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:

0

Reason for score:

This topic was not covered.

Recommendation:

The History, philosophy & Structure of health and social care.pptx lecture could provide opportunities to link health inequalities on certain groups and the slide on global healthcare provision could be discussed in a climate change context. This could be linked to the NHS Long term Plan and its focus on reducing inequality in healthcare.

In the lectures Introduction to Ethics 2024.pptx and Values Ethics and OTPT practice.pptx links could be made between Ethics and planetary Health / disproportionate impacts of climate change to certain groups. Specific reference to health inequalities could be added to slide 20 in Values Ethics and OTPT practice.pptx

Students could be directed to the paper Sustainable Global Healthcare: An Ethical Imperative?

The fact that those from marginalised populations are more likely to be affected by air pollution which could increase their likelihood of red flag conditions, and degenerative neurological conditions could be highlighted to students.

In both Mental Health and Cardiorespiratory lectures the groups shown in the image below from the WHO - communicating on climate change and health could be highlighted as being affected to a greater extent.

Resources / Links:

Climate Change and the Health of Socially Vulnerable People

<u>NHS Long Term Plan</u>

Paper: Sustainable Global Healthcare: An Ethical imperative?

<u>WHO - Communicating on Climate Change and Health</u> (Image from document below)



Curriculum: Sustainability

1.15. Does the curriculum promote the co-benefits of sustainable lifestyle choices (e.g. active transport, green exercise and Healthy Plant-Based Diets) as part of patient education and treatment plans?

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

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

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

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

Score Assigned: 1	1
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Reason for score:

Within the Public Health Padlet resource there was a link to a podcast about physical activity champions that students had the option to access.

Recommendation:

In the lecture History, philosophy & Structure of health and social care.pptx emphasis could be given to NHS long term plan for social prescribing (exercise and diet advice, it also could be linked to sustainability and Active transport)

In the lecture Adaptations to Sedentary living.pptx Links to the co-benefits of active transport and reductions in sedentary lifestyles. This could be linked to the decrease in mortality and the environmental benefits through decarbonisation of transport.

This is also an opportunity to address inequality of access to green spaces for physical activity.

Models of behaviour change could be linked to people making more sustainable lifestyle choices.

In the Lecture Ageing.pptx more could be made of the environmental factors and specifically climate change and the effect it could have on older populations. E.g. links to ageing physiology and extreme heat.

This could also be highlighted in the Objective -Proprioception and CV fitness.pptx and Exercise Prescription 2024.pptx lectures

The American College of Lifestyle Medicines 6 pillars could be discussed in any of the mental health or cardio respiratory lectures or included in the module introduction.

Below there is also a link to a range of nature based physiotherapy research papers and articles, that could be shared with students.

Discussions around the benefits of Whole food Plant based diets in the prevention, treatment and even reversal of CHD could be discussed with students signposted to documentaries such as Game Changers, and Forks over Knives.

The work of Dr. Dean Ornish and Dr Caldwell Esselstyn and their papers could be recommended.

Highlighting the mitigating effect of Plant Based Diets for a variety of conditions featured on the presentation on longevity would be appropriate. See page 166 in ACLM resource

Emphasising social prescription of exercise to prevent osteopenia and sarcopenia would also be appropriate.

The use of conservative treatments as a first line of physiotherapy for MSK conditions could also be linked to reducing over treatment and prescription or the use of surgical interventions as this reduces the carbon footprint of the NHS.

Highlighting the prevention of non-communicable diseases such as CHD, Stroke, and Type 2 diabetes as a part of the NHS Long term plan, and how this will reduce NHS use and therefore its carbon footprint.

More emphasis could be given to lifestyle interventions as adjuncts to traditional treatment, such as adopting a planetary health diet. This could be discussed when talking about Making Every Contact Count.

Highlighting the benefits of green spaces to physical activity and mental health of patients and their co-benefits of absorbing heat and providing shade would be beneficial.

Resources / Links: Intensive lifestyle changes for reversal of coronary heart disease

A range of nature based physiotherapy publications

Plant Based Health Professional UK - CHD fact Sheet

Plant Based Health Professional UK - Fact sheet Library

NHS Long Term Plan

Paper - Exposure to greenspaces could reduce the high global burden of pain

Moving Healthcare Professionals - Programme that can be delivered to students

<u>Planetary Health Diet</u> (Video and image below)

Link to video explaining Planetary Health Diet

ACLM Benefits of Plant Based Diet

American College of Lifestyle Medicine

6 Pillars of Lifestyle Medicine: Physical Activity **Nutrition** Stress A Management Evidence supports the use of Regular, consistent physical a whole food, plantactivity is an important part of Managing negative stress can predominant diet to prevent, overall health and resiliency. lessen anxiety, depression treat and reverse chronic and immune dysfunction and illness. leads to improved well-being. Social Connection Avoidance of Restorative Sleep Risky Substances Improving sleep quality can improve attention span, Positive social connections Use of tobacco and excessive mood, insulin resistance and have beneficial effects on alcohol consumption have can reduce hunger, physical, mental and been shown to increase risk of sluggishness and more. emotional health. chronic diseases and death.

1.16. Does your physiotherapy school curriculum cover the carbon footprint of physiotherapy practice and strategies to reduce it?

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

Reason for score:

Slide 22 HCPC standards & public health.pptx Highlights the NHS carbon footprint

The Introduction to Rehabilitation FINAL.pptx lecture could link successful rehabilitation to decreased ongoing use of the health system (surgery and medication) and a decrease in the NHS carbon footprint.

Recommendation:

Add section to the handbook highlighting <u>Global</u> / <u>NHS</u> sustainability goals

Slide 13 HCPC standards & public health.pptx has several factors that could be discussed in relation to climate change (Agriculture and food production, Environmental conditions and water and sanitation).

Focus of HCPC standards & public health.pptx is health promotion and prevention of illness - add content about social prescribing of exercise and dietary changes to reduce carbon heavy treatments, promote healthy lifestyles.

Sections about how to use Microsoft Teams could provide and opportunity to highlight the benefits to reducing carbon footprints of remote working / Telehealth

Pose the Question "How does climate Change threaten our health?" and then share the 9 ways on the linked UK Health Security Agency blog post.

The use of conservative treatments as a first line of physiotherapy for MSK conditions could also be linked to reducing over treatment and prescription or the use of surgical interventions as this reduces the carbon footprint of the NHS.

During Cardiorespiratory teaching when discussing respiration and CO2 the impact of CO2 and the NHS carbon footprint could be raised and students directed to the Greener NHS website, and specifically the delivering net zero section.

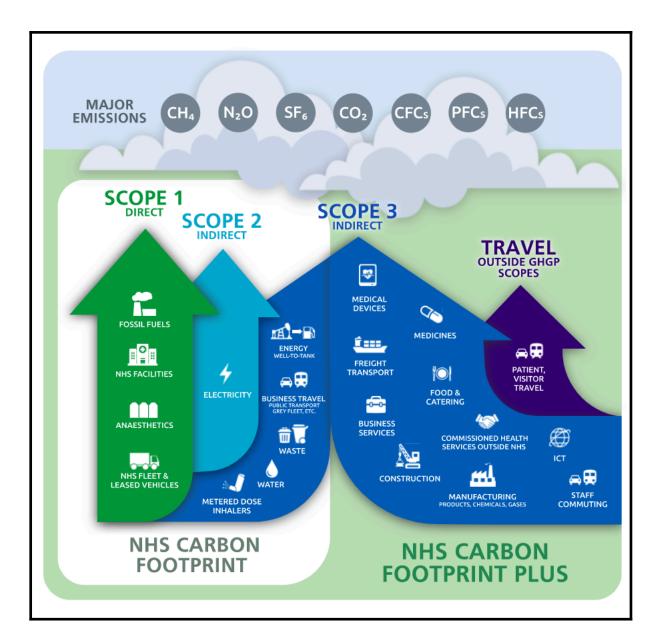
Resources / Links:

NHS Long Term Plan

Cornell - Benefits of remote working.

<u> UK HSA - Health Effects of climate change</u>

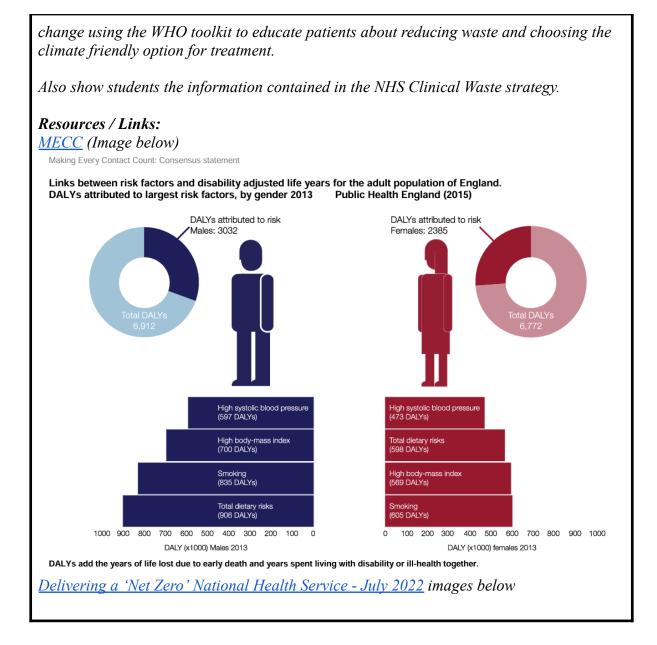
<u>Greener NHS Agenda</u> (Image shown below)

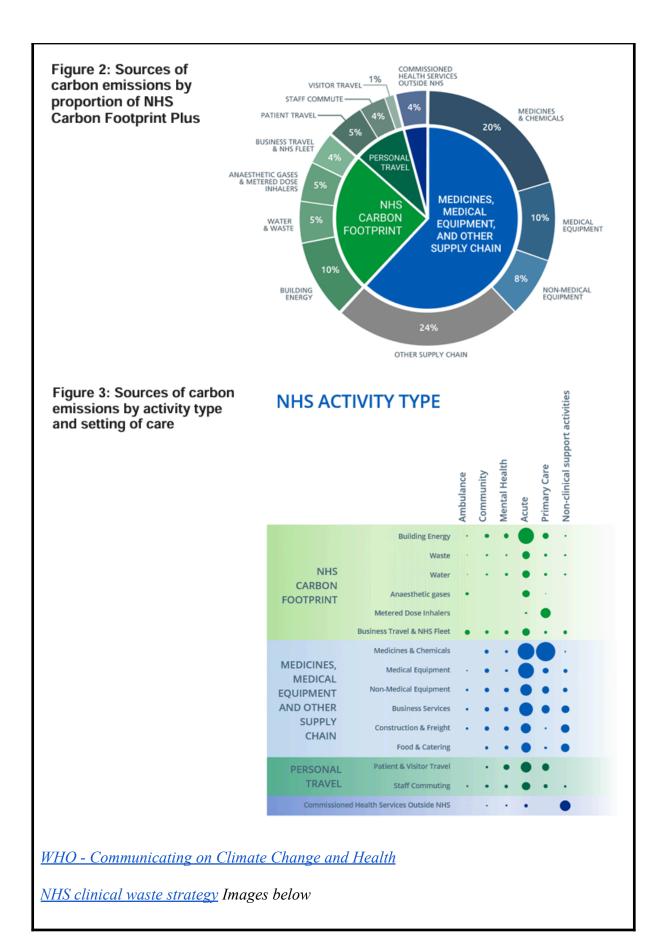


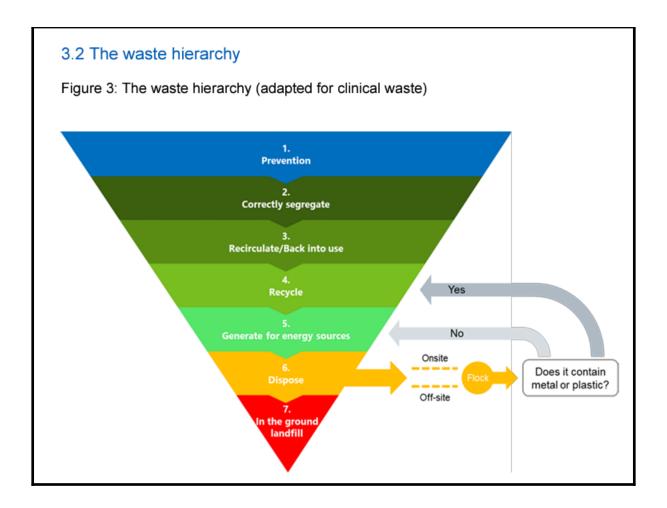
1.17. Does your physiotherapy school curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum (e.g., musculoskeletal, neurological, cardiorespiratory)? (1 point each)	Score
Waste production within the healthcare system and strategies for reducing waste in clinical activities, such as in the operating room. (1 point)	1
The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	0
The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anesthesia environmental impacts, such as total intravenous anaesthesia or choosing less environmentally anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	1
The environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm. Alternatively teaching on deprescribing where possible and its environmental and health co-benefits would fulfill this metric. (1 point)	1

The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes for obesity. This is commonly known as social prescribing. (1 point)	1
The health and environmental co-benefits of avoiding excessive physiotherapy treatment and over-investigation. (1 point)	1
Reason for score: Students were given the choice to have used uniforms to promote sustainability.	
During a neurological rehabilitation practical students were asked to label their pace for the electrical stimulation practical so that these could be re-used to reduce waster	
Although non-pharmaceutical or surgical management and ways to reduce over investigation is encouraged and discussed, the link to the co-benefit of this with rego sustainability is not always made, but as it features regularly it is worthy of credit.	urds to
Recommendation: Better highlighting of the Health and Environmental impacts and benefits when som content is covered, as the link is not made often.	е
Incentivise ordering of second hand uniforms. Make the option to use a second hand uniform the default option on the order form.	!
Make the the co-benefits to the environment explicit in the teaching about using conservative treatments and reducing over investigation	
Add section to handbook highlighting <u>Global / NHS</u> sustainability goals	
In Confidentiality_the Fundamentals OT_PT (Full Presentation).pptx disposal of confidential waste in an environmentally friendly way could be highlighted and high using digital records to reduce waste.	light
Free Plant Based food voucher for use at ARU catering for each 2nd hand piece of a selected over new.	ıniform
Emphasising the benefits of Lifestyle advice given in Make Every Contact Count con prevent many non-communicable diseases. This would also reduce pharmaceutical t	
Reducing Disability Adjusted Life Years (DALYs see image below and MECC docun stopping smoking and promoting a Planetary Health Diet.	nent) by
Emphasising conservative treatments for many conditions using green spaces.	
Make explicit the sustainability benefits of the NHS when discussing ways of reducinuse of x-rays, for example the C-Spine rules and the Ottawa rules.	ig the

Highlighting the use of low carbon inhalers as recommended in the NHS delivering net zero plans during Cardiorespiratory lectures and linking this to communication on climate







Curriculum: Clinical Applications

1.18. In training for patient encounters, does your physiotherapy school's curriculum introduce strategies to have conversations with colleagues and patients about the health effects of climate change?

Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum. (2 points)

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

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

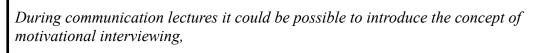
Score Assigned:

0

Reason for score: This topic was not covered.

Recommendation:

Introduce and work through the WHO Communicating on climate change and health: Toolkit for health professionals.



When teaching Make Every Contact Count promote lifestyle changes that could have co-benefits for sustainability and health (active transport, exercise, Planetary Health Diet).

Resources / Links:

Communicating on climate change and health: Toolkit for health professionals



– Sir David Attenborough

<u>Motivational interviewing</u>

<u>MECC</u>

1.19. In training for patient encounters, does your physiotherapy school's curriculum introduce strategies for taking an environmental history or exposure history?
Yes, the core curriculum includes strategies for taking an environmental history. (2 points)

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

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

Score Assigned:

Reason for score:

In the social History section of Resp Handbook .docx it states "Occupation – some jobs increase chance of lung disease eg. Factories, miners, asbestos exposure".

Ax - Sx, Ox, Ausc.pptx Slide 15 - When addressing social history it asks about work/ previous work and risk factors.

Recommendation:

A greater emphasis on environmental history taking could be given and the link to the impacts of climate change made explicit. and the following questions taken from the linked document below could be added to the subjective assessment and history teaching ,and added to the subjective assessment OSCE.

Key Occupational and Environmental Health Questions to be asked with all histories 1. What are your current and past, longest held jobs?

2. Have you been exposed to any radiation or chemical liquids, dusts, mists, or fumes?

3. Is there any relationship between current symptoms and activities at work or at home?

Resources / Links: Taking an Exposure History

Curriculum: Administrative Support for Planetary Health

1.20. Is your physiotherapy school currently in the process of implementing or improving Education for Sustainable Healthcare (ESH) / planetary health education?

Yes, the physiotherapy school is currently in the process of making major improvements to ESH/planetary health education. (4 points)

Yes, the physiotherapy 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:

2

Reason for score:

Anglia Ruskin University (ARU) and the Faculty of Health Medicine and Social Care (HEMS) have created paid internship roles to complete the PHRC this year following on from the Public Health course audit in 2023. It is also developing its own internal award scheme for implementation of sustainability and planetary health in all course curriculums.

Recommendation:

Continue to provide paid internships and create a paid role within each faculty to drive the implementation of the recommendations from both the PHRC and the Green Heron awards.

CPD delivered to all lecture staff about sustainability and planetary health will raise its profile and boost staff expertise.

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

Planetary health/ESH topics are well integrated into the core physiotherapy school curriculum. (6 points)

Some planetary health/ESH topics are appropriately integrated into the core physiotherapy student curriculum. (4 points)

Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s). (2 point)

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

Score Assigned:

0

Reason for score:

There is currently minimal education for sustainable healthcare in the MSc Physiotherapy course

Recommendation:

Adopting the recommendations of this audit will mean that the topics are well integrated.

Having a designated member of the faculty to further develop the recommendations in this audit and drive changes would help to fully integrate these important topics effectively into teaching.

CPD delivered to all lecture staff about sustainability and planetary health will raise its profile and boost staff expertise.

1.22. Does your physiotherapy school employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?

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

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

Score Assigned:

Reason for score:

The course leader is not aware or in contact with a member of faculty who promotes and supports the embedding of sustainability education.

Recommendation:

The Faculty of Health, Medicine and Social Care should have a member of faculty that works with course leaders to promote and support the embedding of sustainability education that is in regular contact.

They should deliver training to all staff and drive forward the changes required to fully integrate planetary health and sustainability into the Physiotherapy curriculum.

Section Total (14 out of 69)

20.3%

Back to Summary Page here

Interdisciplinary Research

<u>Section Overview:</u> 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:

Anglia Ruskin also has a dedicated Institute called the <u>'Global Sustainability Institute'</u> which researches into many areas. Some <u>project examples</u> are:

• CUSP works with people, policy, and businesses to develop a new definition of prosperity that complements a world of environmental, social and economic limits.

1

- *EEIST aims to develop complexity-based modelling solutions to help governments facilitate low-carbon innovation and technological change.*
- The GRO project investigated how the scarcity of finite natural resources will impact global social, financial and political fragility in the short term.

However, there has been no association with the Medical School on collaborative research into healthcare thus only scores a 1. We could improve the score by perhaps implementing a department in the medical school with focus on planetary health research.

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:

Anglia Ruskin University has a dedicated department called <u>'Sustainable Futures'</u> working with regional, national, and international stakeholders to support transformations towards environmentally and socially just societies. Comprising multiple research centers and groups such as the Built Environment Futures Research Group, the Behavioural Ecology Research Group, Sustainably Resilient Infrastructure and Communities group to name a few. There are currently active research projects on 'BLUEPRINT to a circular economy', 'IRENES understand how net zero carbon policies and strategies are utilised for the delivery of renewable energy sources' and 'Wildlife Change in the Arctic Circle'. All can be found here.

3

Anglia Ruskin also has a dedicated Institute called the <u>'Global Sustainability Institute'</u> which researches into many areas. Some <u>project examples</u> are:

- CUSP works with people, policy, and businesses to develop a new definition of prosperity that complements a world of environmental, social and economic limits.
- *EEIST aims to develop complexity-based modelling solutions to help governments facilitate low-carbon innovation and technological change.*
- The GRO project investigated how the scarcity of finite natural resources will impact global social, financial and political fragility in the short term.

This question as a result scores a three because there is at least one dedicated institute researching planetary health

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 <u>institution</u>?

Yes, there is a process in which community members impacted by climate and environmental injustice have **decision-making power** in the climate + environmental research agenda. (3 points)

Yes, there is a process in which community members impacted by climate and environmental injustice **advise** the climate + environmental research agenda. (2 points)

No, but there are **current efforts** to establish a process for community members to advise or make decisions on the research agenda. (1 points)

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

Score Assigned:	2
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Anglia Ruskin also has a dedicated Institute called the <u>'Global Sustainability Institute'</u> which researches into many areas. Some <u>project examples</u> are:

- CUSP works with people, policy, and businesses to develop a new definition of prosperity that complements a world of environmental, social and economic limits.
- *EEIST aims to develop complexity-based modelling solutions to help governments facilitate low-carbon innovation and technological change.*
- The GRO project investigated how the scarcity of finite natural resources will impact global social, financial and political fragility in the short term.

The lead Aled Jones has mentioned how the GSI holds consultations with members of the local community and their input on the research being held at ARU.

As a result this scores a 2 since their voices and opinions are noted but not to the extent of making decisions at the institute.

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:

Anglia Ruskin University has two website pages regarding sustainability research, <u>'Global</u> <u>Sustainability Institute'</u> and <u>'Sustainable futures'</u> both web pages are easy to navigate and upload active and previous research initiatives and can be found here:

3

- <u>GŜI research</u>
- <u>Sustainable futures research</u>

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:

Anglia Ruskin University has hosted multiple conferences and events on topics related to planetary health in the past year. These include:

4

- The 'Net Zero & Climate Resilience Summit 2024' which brought together policymakers, local government representatives, industry leaders, and academics to chart the course toward achieving net zero targets. The summit showcased ten impactful research projects from ARU colleagues and provided a platform to discuss critical planetary health themes such as climate resilience and sustainability.
- The 'Faculty of Science and Engineering (FSE) Away Day Session 2024' which highlighted planetary health-related research and initiatives, including those led by ARU's Health and Care Research Centre.

2.6. Is your <u>institution</u> 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:

0

Currently Anglia Ruskin University is not part of any national or international planetary health organisations. However the School is in the process of applying to join some organisations such as the Planetary and Population Health Research Group which promotes integrated approaches to implement the SDGs and the Paris Agreement, through education, research, policy analysis, and global cooperation.

Section Total (13 out of 17)

76%

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

Community Outreach and Advocacy

<u>Section Overview:</u> This section evaluates physiotherapy 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 participates in community focused events relating to planetary health. (1 point)

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

Score Assigned:

Anglia Ruskin University [ARU] partners with multiple community organisations to promote planetary health. Some examples include:

• *ARU* is working with the 'Big Green Internet Project' to create health conservation and community engagement projects. They are aiming to connect woodlands in Essex by planting trees and preserving nature.

3

- The Wellbeing Mentors in ARU have partnered with three different partnerships across all their campuses to promote planetary health. In the Cambridge campus they partner with the 'Earth and Mind' organisation who provide weekly Sow and Grow events and a monthly foraging activity to ARU students.
- In Chelmsford the Wellbeing mentors partner with the 'Wilderness Foundation' they take ARU students about 4/5 times a year to offer a break and some peace with time to reflect, an opportunity to make some new connections and friends with activities including: fireside conversation, mandala and nature art making, hammock relaxation, toast some marshmallows on the fire.
- *ARU's Petersborough campus Wellbeing Mentors are sending its students to local nature reserves to deal with community involvement with a sustainability project 'About Us'*
- ARU took part in the Chelmsford science festival offering local colleges to come experience sustainability. ARU's stall delivered educational tasks to students, helping them to understand what sustainability was and how this affects health. They discussed topics on how human actions affected nature and some theory activities to engage students with visions of a sustainable future as well as discussion were made on actions needed to achieve this target.

• ARU's MSc on Sustainability collaborates with the Eden project, to equip its student with the skills and knowledge to bring about a change to sustainability -

Links:

- Big Green Internet Project
- Earth and Mind organisation
- <u>The Wildnerness foundation</u>
- The Railworld wildlife Haven 'About Us'
- Chelmsford Science Festival '22 29 October 2024, 09:00'
- MSc and Eden project https://www.aru.ac.uk/global-sustainability-institute-gsi/postgraduate-degrees and https://www.edenproject.com/visit

3.2. Does your <u>institution</u> offer community-facing courses or events regarding planetary health?

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

The **institution** offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)

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

The **institution** has not offered such community-facing courses or events. (0 points)

Score Assigned:

Anglia Ruskin University offers community-facing courses or events at least once every year. Some examples include:

3

- The <u>Global Institute of Sustainability</u> at ARU [GSI] offers multiple post-graduate degrees to teach its students on sustainability. There is a Master degree and a PhD or MPhil on Sustainability offered. The MSc on Sustainability is partnered with the <u>Eden Project.</u>
- The Global Institute of Sustainability [GSI] at ARU also offers <u>multiple events on</u> <u>sustainability</u>. The GSI holds seminars every semester related to sustainability which is open and free to all members of the public, ARU students and staff. GSI holds exhibitions and workshops as well on "Behaviour Change from the inside out, the WHOLE EARTH? exhibition, and a panel debate about the impact of devolution and Brexit on East Anglian environment policy". Conferences are also held at ARU's cambridge campus - "Past conferences have included the Ninth International Conference on Climate Change: Impacts & Responses, and the Sustainable Health Symposium"
- All ARU facilities offer 'ARU Certificate for Professional Development ' [ARUCPD] which is an ARU accredited co-curricular course. Past modules include sustainability and these incentivises students to get involved to help build their CV and employable skills whilst teaching sustainability to the students.
- <u>ARU Education for Sustainability</u> has made changes to include sustainability teaching in all its courses "Anglia Ruskin has made a commitment to covering sustainability in every course. Here you'll find a list of books, journal articles, blogs, websites, newspaper articles and YouTube clips that can help you introduce sustainability into your curriculum."

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:

ARU offers regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications. These are available to all students. Some examples include:

2

- <u>Global Institute of Sustainability</u> at ARU regularly puts out news covering planetary health and/or sustainable health. Some news headline examples include 'Study finds nature can help with integration in UK' - ''It found that the natural environment is a source of joy, motivation, and a means of escaping daily stresses, highlighting its importance in promoting health and wellbeing,", 'Violent deaths linked to price rises will increase' which discusses violent deaths from food, water and fuel insecurity, 'UK must 'war game' future food security risks', and in 2023 'ARU initiative wins national sustainability award'
- ARU Green Newsletters are regularly put out on the ARU student intranet, which one can also subscribe to, to see on their emails. They cover campaigns on planetary health, initiatives such as 'Go Plastic-Free this Christmas' and tips such as 'Energy Saving Season: Your Guide for the Winter'. They also include Prizes such as: green points which allows for £10 vouchers and another one from this december 2024 on 'Enter Our raffle to Win a £30 M&S Voucher'

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:

Both ARU and their main affiliated hospitals 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?

2

- ARU's Global Institute of Sustainability offers 3 post-graduate degrees on Sustainability -MSc and PhD/MPhil Sustainability and a Professional Doctorate
- *ARU ran a 'Climate Pitch' in December 2024 for the school of medicine staff the aim is to teach people quickly and in a fun way on climate change. This includes interactive quizzes and the chances for the audience to engage with the presenters during the activity*
- Mid and South Essex NHS foundations trust hospitals are involved in 'Enhance in the East of England' programme which also includes a section on planetary health and sustainability to give foundation years doctors the ability to enhance additional skills that will aid in the way in which they carry out healthcare in the future

Links:

- <u>https://www.aru.ac.uk/global-sustainability-institute-gsi/postgraduate-degrees#:~:text=The</u> %20Global%20Sustainability%20Institute%20offers,Sustainability%2C%20and%20a%20 Professional%20Doctorate
- <u>https://planetonstage.org/en/pitches/climate-pitch</u>
- <u>https://heeoe.hee.nhs.uk/foundation/training-programme/enhance-eoe</u>
- <u>https://heeoe.hee.nhs.uk/sites/default/files/hee_enhance_handbook_portrait_v6.pdf</u>

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 **Institution** 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:

Neither ARU nor its affiliated teaching hospitals have accessible educational materials for patients about environmental health exposures.

0

Recommendations:

https://www.gov.uk/government/publications/environmental-public-health-surveillance-system/envi ronmental-public-health-surveillance-system-ephss

https://www.niehs.nih.gov/research/supported/exposure

https://www.sciencedirect.com/topics/earth-and-planetary-sciences/environmental-health-exposure

3.6. Does your institution or its affiliated teaching hospitals have accessible educational

materials for patients about the health impacts	of climate change?
Yes, the Institution or <u>all</u> affiliated hospitals hav points)	re accessible educational materials for patients. (2
Some affiliated hospitals have accessible educatio	nal materials for patients. (1 point)
No affiliated hospitals have accessible educational	materials for patients. (0 points)
Score Assigned:	0
Neither ARU nor its affiliated teaching hospitals of patients about the health impacts of climate change Recommendations:	<i>ge.</i>
https://www.niehs.nih.gov/research/programs/clim https://ukhsa.blog.gov.uk/2023/12/11/11-things-to- -report/ https://www.cdc.gov/climate-health/php/effects/ind	-know-about-the-health-effects-of-climate-change

Section Total (10 out of 14)

71%

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Support for Student-Led Planetary Health Initiatives

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

4.1. Does your <u>institution</u> offer support for students interested in enacting a sustainability initiative/QI project?

Yes, the **institution** *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, the institution does not offer opportunities or support for sustainability initiatives or QI projects. (0 points)

Score Assigned:

Anglia Ruskin University offers the following opportunities to students, although neither are mandatory to participate in.

• Anglia Ruskin University offers the opportunity for healthcare students to complete the Green Heron Audit in degrees such as Medicine, Occupational Health and Public Health. This evaluates each module independently for its integration of sustainability and planetary health, identifying areas for improvement and incorporation by providing a wealth of resources.

1

• Additionally, the university further provides an annual opportunity called <u>'The Sustainable</u> <u>Sainji Programme'</u> where students, staff and ARU alumni can participate in voluntary work with a small village in India called Sainji to offer support of a sustainable way of life.

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 **no opportunities** for students to engage in planetary health/sustainable healthcare research. (0 points)

Score Assigned:	1
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The university has an audit known as the <u>'Green Heron Award'</u> which is edited from the PHRC but operates independently to provide students with the chance to modify their curriculum. Throughout this process students have a chance to identify the intersections between environmental issues and health-related concerns and additionally provide a valuable resource bank for lectures to subsequently enhance sustainability education for the entire cohort. In the last year, students from Public Health BSc, Physiotherapy MSc, Occupational Therapy MSc and now Medicine MBChB have completed this audit.

Although students have completed this as part of their Student Selected Component (SSC), which is a mandatory fulfilment of their course, there are a range of options to choose from and only a handful of students will have the opportunity to complete this audit, thus not being awarded 2 points.

4.3. Does the <u>institution</u> have a web page 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 institution and/or contact of information of potential mentors.

The institution has a web page 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 web page that features some information on projects and mentors within planetary health and sustainable healthcare within the Institution, but it lacks key information. (1 point)

There is **no institution** specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. (0 points)

2

Score Assigned:

Anglia Ruskin University has an extensive breadth of information within the website relating to areas of sustainability. Although it requires students to actively seek out opportunities, the pages are very accessible and easy to navigate through to find up-to-date information on workshops and research that is ongoing. It includes resource guides on Education for Sustainability for each course, contact information and missions for approach to sustainability across all ARU campuses. https://www.aru.ac.uk/about-us/sustainability

<u>https://www.aru.ac.uk/about-us/sustainability/our-approach/students/choosing-a-sustainable-life</u> <u>https://www.aru.ac.uk/global-sustainability-institute-gsi/education-for-sustainability</u> <u>https://www.aru.ac.uk/global-sustainability-institute-gsi/about-us/contact-us</u>

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

Yes, there is a student organisation at my Institution dedicated to planetary health or sustainability in healthcare but it **lacks faculty support.** (1 point)

No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)

Score Assigned:

Anglia Ruskin University has Peer Wellbeing Mentors across the different campuses for ARU that promote planetary health engagement, with support from the faculty, alongside two partnerships.

• The Cambridge campus partners with 'Earth and Mind' to provide weekly 'Sow and Grow' events as well as a monthly foraging activity to ARU students.

2

• The Chelmsford campus works with 'The Wilderness Foundation' to offer students a break 4-5 times a year through activities such as mandala and nature art making.



Furthermore, there are societies within campus that are specifically intended for sustainability

- There is a Group for Environmental Management and Sustainability (GEMS)) which is a predominantly online society
- The 'Sustainability Society' hosts events and workshops relating to sustainability, energy-saving habits, item swaps, tree planting and many more.

4.5. Is there a student liaison representing sustainability interests who serves on a <u>department</u> <u>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
At Anglia Ruskin University, there is a student rep addresses the issues. The link can be found <u>here.</u>	o, who is a part of the Student Union, that

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.	0
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	0
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	0
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1

- 'Earth & Mind' and ARU 'Peer Wellbeing' mentors collaborate to promote weekly 'Sow & Grow' sessions which allows students to engage in gardening, caring for houseplants and nature-based crafts. There are also monthly walks to explore the natural world through foraging. These occur in the Cambridge campus.
- The Chelmsford campus works with 'The Wilderness Foundation' several times a year to allow students some time to reflect by offering events such as; fireside conversation, mandala and nature art making, hammock relaxation and toasting marshmallows on the fire.
- The 'Peer Wellbeing Mentors' in the Peterborough campus also aim to take a wellbeing trip to Railworld Nature Haven in April.
- There is a society called 'Group for Environmental Management and Sustainability (GEMS)' who have hosted a nature bingo event, which had participants photograph different categories on the card for a chance to win prizes.
- The GEMS society have had a guest speaker discuss cohabitation with insects in our garden, evaluating the need for conservation or control.
- ARU hosts water sports activities such as water rafting, kayaking, sailing and more for students.



Section Total (10 out of 15)	67%
	0170

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Campus Sustainability

Section Overview: This section evaluates the support and engagement in sustainability initiatives by the institution. The healthcare industry is a major contributor to greenhouse gas emissions and 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:

Anglia Ruskin University has a designated <u>Sustainability Team</u> which covers the campuses. This includes three full-time members of staff. However, they don't cover sustainability of the different hospitals where the Medical Students have placement (Basildon University Hospital, Broomfield Hospital, Colchester Hospital, Princess Alexandra Hospital (Harlow) and Southend University Hospital.

2

Home \rightarrow About us \rightarrow Sustainability and ARU

Sustainability and ARU

At ARU we've pledged to incorporate sustainability into every aspect of our University's conduct and administration – from our curriculum, to student life and activities, and through our sustainability research and the impacts of our campuses.

Here, you can read about our approach to sustainability and some of the work that's happening across ARU.



Harry Orchard, Sustainability Officer (harry.orchard@aru.ac.uk)

5.2. How ambitious is your institution's plan to reduce its own carbon footprint?

The institution has a written and approved plan to achieve carbon neutrality by 2030 (5 points)

The institution has a written and approved plan to achieve carbon neutrality by 2040 (3 points)

The institution has a stated goal of carbon neutrality by **2040** but has **not created a plan** to reach that goal or the **plan is inadequate** (1 point)

The institution does **not** meet any of the requirements listed above (0 points)

Score Assigned:

Anglia Ruskin University aims to <u>reduce carbon emissions to zero by 2045</u>, also including indirect emissions. The University has in-place a <u>Climate Positive Plan</u> in order to achieve this. The plan focuses on five areas: heating, power and refrigerants, travel, purchasing, and decision making. Unfortunately, 2045 doesn't meet any of the years as part of the scoring system so this scores a 0.

0

Although the projected year doesn't fit the recommended criteria, it is important to note that Anglia Ruskin has already achieved their pledge of carbon reduction!

Home \Rightarrow About us \Rightarrow Sustainability \Rightarrow Sustainable campuses \Rightarrow Energy, carbon and water Sustainability Energy, carbon and water Our approach We declared a climate emergency in September 2019, recognising the scientific consensus that we only have until 2030 to deliver deep Sustainable campuses cuts in carbon emissions to avert the most serious consequences of Biodiversity climate change Circular economy Through our teaching, research, campus management and partnerships, we Energy, carbon and water will do all within our means to tackle the causes and consequences of climate change. Carbon reduction investments Our goal Get involved We will reduce our carbon emissions to zero by 2045, including indirect Travel (Scope 3) emissions. Our 🖿 ARU Climate Positive Plan (PDF) details how we will achieve this Awards and achievements By 2026 all of our electricity will be obtained from zero carbon sources, and we will have improved the energy efficiency of our estate by at least 10%. Earth Day at ARU Carbon reduction investments To achieve our carbon reduction goals we are investing in energy saving and on-site generation measures. Find out about the innovative energy performance contract we established to manage this programme of investments.

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)

1

Score Assigned:

The entirety of ARU, including buildings used for the Medicine degree, use electricity that is 100% zero-carbon from off-site sources (20% wind farms, 80% nuclear power). ARU has recently installed more solar panels, as part of the <u>RE:FIT carbon reduction programme</u>, and does not have exact figures for this yet, however it is projected to account for 4% of consumption, leaving 20% from wind farms and 76% from nuclear power.

Our carbon and energy performance

See how our direct carbon emissions have fallen since 2006 and how we're performing compared to our targets (PDF).

Our Scope 1 and 2 carbon emissions result from the energy we use to power, heat and light our campuses and operate our small vehicle fleet.

Our Scope 3 carbon emissions result from activities up and down our value chain, such as the production of goods and services we buy, the transport of people and materials to our campuses, as well as travel that staff and students need to complete for their work.

We have 142 kW, or about 1,420 square metres, of solar panels installed on our buildings, which prevents 13 tonnes of carbon dioxide from entering the atmosphere each year.

All of the electricity we purchase is 100% zero-carbon and since October 2019, 20% of our baseload electricity has come from wind farms in Scotland and Wales through an innovative **Power Purchase Agreement**. The remainder of our electricity is sourced from UK nuclear power stations.

We have also established an <u>Energy Performance Contract</u> to deliver a range of energy saving measures across our buildings in several phases.

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 new buildings on the institution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)

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

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

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

Score Assigned:	2
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During the <u>RE:FIT carbon reduction programme</u>, ARU has worked to improve the sustainability of existing buildings. Major renovations of existing buildings and new builds have been marked as BREEAM Excellent, awarded a Passivhaus Certification and have to have had a whole life carbon assessment (RICS). Minor renovations/refurbishments are graded as BREEAM Refurbishment and Fit-Out Excellent, and have a Passivhaus/Enerphit Certification.

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)

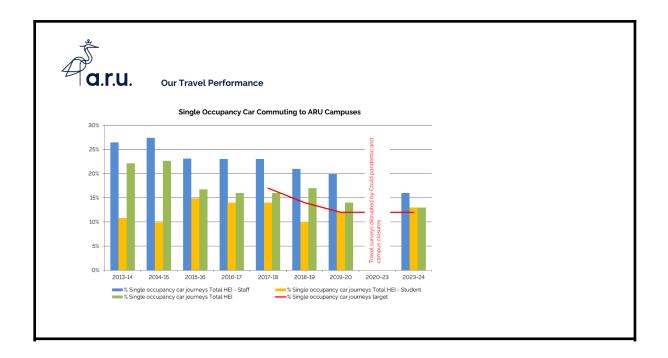
1

Score Assigned:

ARU offers a few different strategies for increasing environmentally-friendly travel for staff and students. The University asks staff to prioritise online meetings via MS Teams in the first instance, ruling out the necessity for travel. ARU encourages the prioritisation of low-carbon travel where possible (land travel for distances less than 750 miles). Furthermore, ARU offers travel discounts for a variety of different bus and train companies for staff and students to use. There are also bike racks and electric charging points on campus, as well as a Cycle-to-Work scheme. As a result of their work, the single-occupancy car commutes have decreased from 23% of car commutes in 2013-14 to 13% in 2023-24. These schemes and information are all available on the ARU website, but aren't emphasised to students during teaching or introductory sessions.

More information can be found here:

https://www.aru.ac.uk/about-us/sustainability/sustainable-campus/travel https://www.aru.ac.uk/-/media/Files/about-us/sustainability/Our-travel-performance-charts.pdf



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)

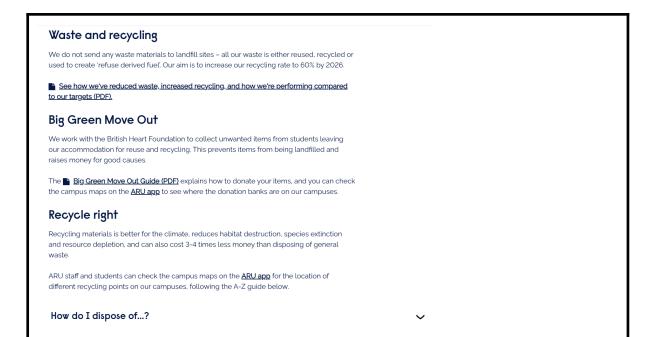
There is **no** compost or recycling program at the Institution. (0 points)

Score Assigned:

2

ARU offers both organics and non-organics recycling on the University campuses. General recycling includes cardboard, plastics, glass, metals and paper, and food waste recycling is offered at catering outlets onsite. On the Chelmsford campus, food waste goes directly to the on-site 'Wormery'. Additionally, no waste produced at ARU goes to landfill; instead, any waste goes on to be recycled or to create refuse derived fuels. ARU aims to increase recycling rates to 60% by 2026.

More information can be found here: <u>https://www.aru.ac.uk/about-us/sustainability/sustainable-campus/circular-economy</u>



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

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

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

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

Score Assigned:

ARU has a <u>Sustainable Food Policy</u> which covers all food outlets and food served by ARU (excluding food purchased from vending machines). The policy speaks about reducing meat consumption by 50%, encourages reusable containers and cutlery, uses cardboard as packaging which can be fully recyclable, bans single-use plastics, uses seasonal produce where possible and prioritises products delivered with no/minimal packaging and encourages suppliers to prioritise this also. ARU has also been awarded the 'Food for Life Served Here' bronze award from the Soil association, an award which highlights serving local food, cooking from scratch, tracing meat back to farms, seasonal produce and local purchasing.

3

More information can be found here:

https://www.aru.ac.uk/about-us/sustainability/sustainable-campus/circular-economy https://www.aru.ac.uk/-/media/Files/about-us/sustainability/Sustainable-Food-Policy.pdf



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: 3

ARU has a 'Responsible Procurement Policy' which is mandatory for procurement of all goods. The policy aims to evaluate key local supplier environmental status and performance, so this scores a 3. An overview of the policy is listed below:

- The policy looks into balancing economic, social and environmental factors when looking to purchase goods
- The policy highlights the importance of the University's commitment to environmental and social factors for tenders
- It also describes how tenders are evaluated using an assessment of life-cycle carbon emissions
- It describes the use of incentives and performance indicators in order to reflect on environmental and social performance
- The policy speaks about eh engagement with suppliers to encourage good social practice and environmental good practice
- It also states that ethical sourcing standards, like Fair Trade, are considered for all goods where possible

More information can be found here:

https://www.aru.ac.uk/about-us/sustainability/sustainable-campus/circular-economy https://www.aru.ac.uk/-/media/Files/about-us/governance/responsible-procurement-policy.pdf



Responsible Procurement Policy

ARU is committed to responsible procurement through the integration of economic, environmental and social elements of sustainability throughout our entire procurement process and expect the same standards from all of our contractors, suppliers and other business partners.

We recognise that our purchasing can have advorse as well as positive impacts on our community and environment, both locally and globally. Through its purchasing decisions ARU aims to strengthen the sustainability of society and the environment.

This Policy forms part of our broader sustainability policy and management system which is certified to the international standard ISO 14001.

The aims of this policy are to improve our key suppliers' environmental, economic and social performance. including their understanding and response to the Modern Slavery Act 2015, by using more efficient goods and services and fair working practices.

This policy is identified within the Financial Regulations and must therefore be complied with by all staff.

An assessment of the sustainability risks and opportunities associated with our key product and service categories is incorporated within our register of environmental aspects and impacts and procurement category analysis.

Our Procurement and Sustainability Strategies provide the objectives, targets, timelines and resources to deliver these commitments and inform a regular review of this policy.

Through this Policy we will commit to the following:

Procurement decisions will balance economic (including Whole life costs), social and environmental factors. We will engage with suppliers to develop, create and facilitate opportunities for students to gain career-relevant insight and give direct access to employment opportunities.

Tender specifications will clearly demonstrate the importance of our commitment to the integration of economic. environmental and social factors throughout our entire procurement process.

Tender evaluations for contracts above the Public Contracts Regulations thresholds there will be consideration to include an assessment of the life cycle carbon emissions.

Contract management will include performance indicators and incentives which reflect the environmental and social performance of the requirement.

We will prioritise **SMEs and local suppliers** to maximise local employment generation and economic value.

We will engage with suppliers to encourage their adoption of environmental and social good practice and build awareness and an active response to slavery and human trafficking.

Ethical sourcing standards, such as fair trade, shall be considered for all goods, particularly those identified as high risk.

Advice and support will be provided to our staff who undertake procurement activities on how to implement this policy.

The University will **monitor and report** on progress applying this Policy.



5.9. Are there sustainability requirements or guidelines for events hosted at the institution?

Every event hosted at the institution must abide by sustainability criteria. (2 points)

The institution **strongly recommends or incentivizes** sustainability measures, but they are **not required.** (1 point)

There are **no** sustainability guidelines for institution events. (0 points)

Score Assigned:

1

ARU don't currently have any sustainability guidelines for hosted events, but the Catering and Events team are in the process of drafting this. The Student Union offers the 'Student Societies' Green Fund' where societies have the chance to apply for extra funding as an incentive for performing 'Green Criteria'. Some of the event Green Criteria include using paper plates and utensils, prioritising fair-trade and sustainable food, organising leftover refreshments to be given to food banks and advertising reusable containers.

https://www.aru.ac.uk/-/media/Files/about-us/sustainability/Society-Green-Fund-Handbook.pdf

Criteria 3. Events

ction	SDG 1	SDG 2
a) Use reusable cups, plates, cutlery, and tablecloths etc. at society meetings / events	<u>Goal 12</u> <u>Responsible</u> <u>Production</u> &Consumption	
 b) If food / drink is provided at society meetings / events, consideration should be made to prioritise fairtrade, vegetarian, vegan or responsibly packaged products 	Goal 12 Responsible Production &Consumption	
c) If there are any food / drink leftovers from society meetings or events, donate these to a local food bank / organise a food bank donation	<u>Goal 2 Zero</u> <u>Hunger</u>	
d) Advertise ARU coffee cups / water bottles	<u>Goal 12</u> <u>Responsible</u> <u>Production</u> &Consumption	
 e) Make a public pledge to reduce waste at club / society meetings / events via social media and outli to steps you will take to achieve this 	ne <u>Goal 12</u> <u>Responsible</u> <u>Production</u> &Consumption	# 14 Life Below Wat – reducing plastic
f) All committee members to read the <u>waste and recycling information</u> and complete the <u>quiz</u>	Goal 12 Responsible Production &Consumption	# 14 Life Below Wa – reducing
g) If producing posters for events, include a 'recycle me' logo to encourage people to recycle them	Goal 12 Responsible Production &Consumption	

Action	SDG 1 SD	G 2
 h) Organise a sports / exercise event for club members of at least 30 minutes, submit pictu members participating 	res of club Goal 3 Good Health & Wellbeing	
 Organise a craft, artistic / creative event for club members of at least 30 minutes, submit club members participating 	pictures of Goal 3 Good Health & Wellbeing	
j) Organise a mindfulness meditation / sound bath session of at least 30 minutes, submit p members participating. There are a number of sound bath / guided meditation sessions a YouTube		
k) Organise a 'friendly' competitive event such as a board or video games	Goal 3 Good Health & Wellbeing	
l) Organise a 'Tea and talk' session for club / society members	Goal 3 Good Health & Wellbeing	

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:

There are currently no initiatives/guidelines in place for ARU lab spaces. However, ARU will likely apply for LEAF accreditation in the near future in order to reduce carbon emissions.

0

<u>https://www.ucl.ac.uk/sustainable/take-action/staff-action/leaf-laboratory-efficiency-assessment-fra</u> <u>mework</u>

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:	3		
Anglia Ruskin University has signed the <u>'Fossil Free Declaration'</u> and is fully divested from fossil fuel and fossil fuel companies.			
Students and People & Planet. By signing the declaration we declare that we have no investments in extractor fossil fuel companies and pledge to remain fossil free in the future.			

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	
А	80% - 100%	
В	60% - 79%	
С	40% - 59%	
D	20% - 39%	
F	0% - 19%	

Planetary Health Grades for the Anglia Ruskin University MSc Physiotherapy (Pre-Reg)

The following table presents the individual section grades and overall institutional grade for the Anglia Ruskin Physiotherapy MSc (Pre-Reg) Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(14/72) \ge 100 = 20\%$	D-
Interdisciplinary Research (17.5%)	(13/17) x 100 = 76%	B+
Community Outreach and Advocacy (17.5%)	(10/14) x 100 = 71%	В
Support for Student-led Planetary Health Initiatives (17.5%)	(10/15) x 100= 67%	В
Campus Sustainability (17.5%)	(18/32) x 100 = 56%	C+
Institutional Grade	53.48%	С