I affirm

Definitions **Cornell University:**

In general terms, **intellectual property is any product of the human intellect that the law protects from unauthorized use by others.**  **The ownership of intellectual property inherently creates a limited monopoly in the protected property.**  Intellectual property is traditionally comprised of four categories:  [patent](https://www.law.cornell.edu/wex/patent), [copyright](https://www.law.cornell.edu/wex/copyright), [trademark](https://www.law.cornell.edu/wex/trademark), and [trade secrets](https://www.law.cornell.edu/wex/trade_secret).

[Intellectual property | Wex | US Law | LII / Legal Information Institute (cornell.edu)](https://www.law.cornell.edu/wex/intellectual_property)

All people are fundamentally morally equal. There is no natural distinction among persons that justifies one person or group having ethical priority over any other person or group. Equality is the basis for all ethics because any ethical rule must treat individuals with moral worth.

**All resources derive ultimately from the commons, and all agents have an innate, equal, original claim to a fair share of an undiminished commons. This right holds regardless of arbitrary characteristics of birth, such as location or recency. Roark:**

**“**The notion that **moral agents have an initially equal moral claim** in respect **to natural resources** is highly plausible because **an agent cannot appeal to anything that she has done or a**ny sort of **hereditary right** that she has **to establish a greater initial claim over natural resources** than any other agent can legitimately claim. All agents stand in the same initial moral relationship to natural resources. ***No* agent is morally, or**for that matter **causally, responsible for creating** or establishing in any way whatsoever **land,** fresh **water,** the oceans, **the atmosphere,** crude oil, wild berries **or any other natural resources**. Natural resources are simply established or given by Nature or God. **Appealing to an agent’s industriousness**, labor, or other aspects of her agency **cannot demonstrate** that she possesses **any greater initial claim to** natural **resources** than any other agent **because natural resources are not brought about as a result of labor** or any aspect of agency**.”**

Roark, Eric. Removing the Commons. Lexington Books, August 28, 2013. P. 3.

**And, ideas work the same way. Just as no one can lay claim to all natural resources, no one can lay claim to all ideas as a resource.**

**Recency of birth is arbitrary so the right to equitable access to the commons persists across generations. Weiss:**

**“**The second fundamental relationship is that between different generations of the human species. All generations are inherently linked to other generations, past and future, in using the common patrimony of earth. To define intergenerational equity, it is useful to view the human community  as a partnership among all generations. In describing a state as a partnership, Edmund Burke observed that ‘as the ends of such a partnership cannot be obtained in many generations, it becomes a partnership not only between those who are living but between those who are living, those who are dead, and those who are to be born.’ The purpose of human society must be to realize and protect the welfare and well-being of every generation. This requires sustaining the life-support systems of the planet, the ecological processes, and the environmental conditions necessary for a healthy and decent human environment. In this partnership, **no generation knows** beforehand **when it will be** the **living** generation, how many members it will have, **or** even **how many generations there will** ultimately **be**. It is useful, then, to  take the perspective of a generation that is placed somewhere along the spectrum of time, but does not know in advance where it will be located. Such a **[Each] generation would want to inherit the earth in at least as good condition as it had been in for any previous generation** and to have as good access to it as previous generations. **This requires each generation to pass the planet on in no worse condition than it received it in and to provide equitable access to its resources** and benefits**. Each generation is thus** both **a trustee for the planet** with obligations to care for it and a beneficiary with rights to use it**.”**

Weiss, Edith. “Our rights and obligations to future generations for the environment.” The American Journal of International Law, vol. 84, No. 1, January 1990, pp. 198-207.

**This means the Lockean Proviso is true. A taking from the commons violates the equity rights of others if it fails to leave “enough and as good” in terms of access. Locke explains:**

**“**Nor was this **[The] appropriation of a**ny **parcel of land, by improving it, [is not] a**ny **prejudice to any other** man, **where there was still enough, and as good left**; and more than the yet unprovided could use. So that, in effect, **there was never the less left for others because of [one’s]** his **enclosure for [oneself]** himself: **for** he **[they] that leave**s **as much as another can make use of, does as good as take nothing at all**. No body could think himself injured by the drinking of another man, though he took a good draught, who had a whole river of the same water left him to quench his thirst: and the case of land and water, where there is enough of both, is perfectly the same**.”**

Locke, John. Two Treatises Concerning the Original Extent and End of Civil Government. [Bracketing for gendered language.]

All economies are bound by these moral requirements regardless of their degree of advancement. When all common resources have been parceled out or developed, the right of each person born to equitable access to an undiminished commons is not reduced. The hoarding of resources by some constitutes an unjust taking in the face of scarcity experienced by others.

**Thus the criterion is Lockean Libertarianism. van der Vossen explains:**

Plausible versions of libertarian theory must therefore attempt to strike some balance between the maximally restrictive and maximally permissive views. Consider ***Lockean libertarianism***, which **allows unilateral** use and **appropriation but insists on restrictions at** both **the stage of appropriation—in the form of the Lockean proviso** that “enough and as good” be left for others**—and subsequent possessions—because no one can exclude the needy from** one's **property. Lockean libertarianism views natural resources as initially unprotected by any property rule** (no consent is needed for use or appropriation) **but as protected by an ongoing compensation liability rule. Those who use natural resources**, or claim rights over them, **owe compensation to others for any wrongful costs imposed.**

van der Vossen, Bas, "Libertarianism", The Stanford Encyclopedia of Philosophy (Spring 2019 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2019/entries/libertarianism/>.

Prefer additionally –

a. Actor spec: The aff framework defines ethics in context of both the state and the individual – other theories pigeonhole ideology to one or the other but don’t concern how they interact. i.e. Kant only defines obligations of individuals, and util defines the state’s role as a policymaker, but the aff explains the federal role in individual life, and the individual obligation in relation to the commons.

b. Performativity: individuals have certain natural rights that must be met in order to access the space of argumentation and engaging in other ethical theories. Hoppe:

**“Argumentation does not consist of free-floating propositions but is a form of action requiring the employment of scarce means**; and that the means which a person demonstrates as preferring by engaging in propositional exchanges are those of private property. For one thing, **[N]o one could** possibly **propose anything**, and no one could become convinced of any proposition by argumentative means, **if a person’s right to make exclusive use of [their] physical body were not** already **presupposed. [This]** It is this recognition of each other’s mutually exclusive control over one’s own body which explains the distinctive character of propositional exchanges that, while one may disagree about what has been said, it is still possible to agree at least on the fact that there is disagreement. It is also obvious that such a property right to one’s own body **must be** said to be **justified a priori, for** anyone who tried to justify **any norm** whatsoever would already have to **presuppose[s]** the exclusive right of control over his body as a valid norm **[it]**.  simply in order o say, ‘I propose such and such.’ **Anyone disputing [this]** such a **right would [commit]** become caught up in **a practical contradiction** since arguing so would already imply acceptance of the very norm which he was disputing.”

Hoppe, Hans-Hermann. The Economics and Ethics of Private Property, p. 334.

c. Motivation—only a framework that guides state action with individual internal motivations can be good insofar as we can account for both state and individual action when it comes to access to the commons

d. Ethical theories themselves determine what counts as evidence, not an external framework. Joyce:

Joyce, Richard. Myth of Morality. Port Chester, NY, USA: Cambridge University Press, 2002. p 45-47. /// AHS PB /// (N8)

This distinction between what is accepted from within an institution, and “stepping out” of that institution and appraising it from an exterior perspective, is close to Carnap’s distinction between internal and external questions. 15 Certain “linguistic frameworks” (as Carnap calls them) bring with them new terms and ways of talking: accepting the language of “things” licenses making assertions like “The shirt is in the cupboard”; accepting  mathematics allows one to say “There is a prime number greater than one hundred”; accepting the language of propositions permits saying “Chicago is large is a true proposition,” etc. Internal to the framework in question, **confirming or disconfirming the truth of** these **propositions is** a **trivial** matter.But traditionally philosophers have interested themselves in the external question – the issue of the adequacy of the framework itself: “Do objects exist?”, “Does the world exist?”, “Are there numbers?”, “Are the propositions?”, etc. Carnap’s argument is that **the external question,** as it has been typically construed, **does not make sense.** From a perspective that accepts mathematics, the answer to the question “Do numbers exist?” is just trivially “Yes.” From a perspective which has not accepted mathematics, Carnap thinks, the only sensible way of construing the question is not as a theoretical question, but as a practical one: “Shall I accept the framework of mathematics?”, and this pragmatic question is to be answered by consideration of the efficiency, the fruitfulness, the usefulness, etc., of the adoption. But the (traditional) philosopher’s questions – “But is mathematics true?”, “Are there really numbers?” – are pseudo-questions. By turning traditional philosophical questions into practical questions of the form “Shall I adopt...?”, Carnap is offering a noncognitive analysis of metaphysics. Since I am claiming that we can critically inspect morality from an external perspective – that we can ask whether there are any non-institutional reasons accompanying moral injunctions – and that such questioning would not amount to a “Shall we adopt...?” query, Carnap’s position represents a threat. What arguments does Carnap offer to his conclusion? He starts with the example of the “thing language,” which involves reference to objects that exist in time and space. **To** step out of the thing language and **ask** “But **does the world exist?” is a mistake,** Carnap thinks, **because** the very notion of **“existence” is a term** which belongs to the thing language, and **[that] can be understood only within that framework,** “hence this concept cannot be meaningfully applied to the system itself.” 16 Moving on to the external question “Do numbers exist?” Carnap cannot use the same argument – he cannot say that “existence” is internal to the number language and thus cannot be applied to the system as a whole. Instead he says that philosophers who ask the question do not mean material existence, but have no clear understanding of what other kind of existence might be involved, thus such questions have no cognitive content. It appears that this is the form of argument which he is willing to generalize to all further cases: persons who dispute whether propositions exist, whether properties exist, etc., do not know what they are arguing over, thus they are not arguing over the truth of a proposition, but over the practical value of their respective positions. Carnap adds that this is so because **there is nothing that both parties would possibly count as evidence that would sway the debate one way or the other.**

Offense

(IPRs are intellectual property rights)

**Intellectual property is not real property, D'Amato 13:**

Economics assays to confront the very real problems presented by the relationship between scarcity and the exchange of tangible, valuable goods and services. Regardless of the involuted claims of intellectual property proponents, ideas — which are the object of patents and copyrights — are not scarce. Indeed, unlike many of the other things we may consider as non-scarce, **ideas are not** even **capable of becoming scarce**, **[they] exist**ing **in the immaterial, conceptual realm, not the concrete, physical world. Legitimate property can apply only to that latter sphere, as a necessary expedient** that allows free individuals in civil society to resolve controversies and **to form secure expectations about the future** before controversies arise. It follows that **individuals can only own things**, exercising exclusive rights over them, **where those things are of the sort that requires exclusion** in order **for justice to be done**. For instance, the substance of my ownership of my automobile would be rather flimsy if everyone in my neighborhood were allowed to use it freely, without permissionas well. **Ideas are a different matter** of a different nature. **My exertion of “your idea”** (we will come to the absurdity of this phrase below) **in no way limits or encroaches upon your absolute and unqualified use and enjoyment of it**. Simply put, there could never be a circumstance in which the supply of ideas became finite, in which exclusion might be justified.

Not only is **the grant of ownership rights over ideas [is] ridiculous**, it is also, in point of fact, **[and] impossible**. When intellectual property laws undertake to grant such ownership, then, the result as a practical matter is that those laws do ultimately apply themselves to scarce material objects — just not in any defensible manner. Intellectual property privileges simply confer upon their beneficiaries the prerogative to coercively prohibit others from using or arranging their rightful personal property in otherwise peaceful and permissible ways. Patents decree that an individual cannot employ known laws of physical nature together with her own property in ways particularly set forth in special government documents; they therefore necessarily endow their holders with partial ownership rights over others’ property.

Any attempt to neatly partition the contributions made by one mind or another, through all the ages of invention and scientific discovery, is vain and fruitless to the point of inanity. Inventions constantly both absorb and propagate one another, plagiarizing, consuming and collaborating to create still newer inventions. To source any idea whatsoever to a particular individual or group is to assume that we know far more than we ever could about the full picture of the idea’s germination and evolution. Given that every idea has had thousands of contributors through the years, to choose a single beneficiary (whether individual or corporate) of intellectual property’s limited monopolies is foolish and uneconomical even taken on its own terms. This free flow of ideas is extremely beneficial and is fostered by genuine free market competition.

Intellectual property on the other hand — quite contrary to the empty claims of its advocates — is a millstone around the neck of innovation and technological progress, a political mechanism for stifling both in favor of bare monopoly. And to be sure monopoly has always been the raison d’être of intellectual property protections. As nineteenth-century libertarian Joshua King Ingalls observed, “The interest manifested in the rights of authorship and of invention is too flimsy a pretense to deceive any but those who court deception.” As a historical matter, **the real purpose of i**ntellectual **p**roperty **has not been to protect inventors and authors, but** rather **to concentrate** useful, **valuable information in the hands of a privileged class**, tied to the cynosures of political power.

D'Amato, David S. “Intellectual Property Is Not True Property:” Mises Institute, 10 Sept. 2013, mises.org/library/intellectual-property-not-true-property. Valley JS

If intellectual property is not real property, then it can’t be justified under a Lockean proviso which deals with property rights.

**And Intellectual property protections exclude others from the information commons, Tavani:**

Let us assume that the information commons is infinitely expandable in terms of the kinds of intellectual objects that can be produced. Would this phenomenon in itself be sufficient to ensure that the information commons is not in danger of being eroded? We should note that **IPRs have been granted not** only for the production of intellectual objects but also **for the development of certain kinds of methods used to access those objects**. Additionally, **IPRs that are granted for these purposes can result in restricting one’s ability to access and use information**, in the same way that fencing off sections of the physical commons resulted in individuals being denied access to tangible objects such as acorns and apples.20

Many advocates for IPRs believe that the methods used to access digitized information are among the kinds of things that deserve legal protection.21 However, critics point out that **granting** this kind of **protection has already resulted in ordinary individuals being denied access to information that had previously been available to them**. In this sense, then, **the information commons** (like the physical commons in England during the 17th and 18th centuries) **is subject to erosion; and it can be eroded even if** countless **new intellectual objects are produced**. Because the current threat to the information commons is analogous in relevant respects to the threat posed to the physical commons in Locke’s time, looking to Locke’s property theory for possible guidance would not seem unreasonable.

Tavani, Herman T. "Locke, intellectual property rights, and the information commons." Ethics and Information Technology 7.2 (2005): 87-97. Valley JS

This affirms under the Lockean proviso: the information commons being cut off for other people does not leave “enough and as good as” for others because of the way it is eroded.

Contention Two: I.P protections as of now don’t leave “enough and as good” of resources for future generations **Sonderholm:**

**The natural right of appropriation central to libertarianism has an important proviso** (famously formulated by Locke) which is **an ‘enough and as good’ clause on original appropriation**. The proviso states that **one can only appropriate unowned resources if one leaves enough and as good for others. Where resources are scarce, one cannot legitimately stake a claim to something by annexing one’s labor to it. Neither can one come to own the scarce resource by enhancing its value. If the resource is necessary for the** continued **well-being of others**, then **the fact that x was the one who developed or improved the resource does not give x exclusive rights over it. x’s entitlement to reward for [their]**her **labor is overridden by the entitlement of others to that which is necessary for their survival.**

Sonderholm, Jorn. "Ethical issues surrounding intellectual property rights." Philosophy Compass 5.12 (2010): 1107-1115. [bracketed to avoid gendered language]

Tavani, Herman T. "Locke, intellectual property rights, and the information commons." Ethics and Information Technology 7.2 (2005): 87-97.

**It also limits the commons Tavani:**

Whereas the physical commons that Locke describes has been significantly diminished since the 17th century, we might assume that another kind of commons – i.e., one comprised of ideas and information – has not been similarly affected. However, some now worry that **the information commons** (also sometimes referred to as the ‘‘intellectual commons’’) **is in danger of experiencing a fate similar to the physical commons** of Locke’s time. But what, exactly, is the information commons? A useful description of what is meant by this expression is put forth by Buchanan and Campbell (2005, p. 229) as:

A body of knowledge and information that is available to anyone to use without the need to ask for or receive permission from another, providing any conditions placed on its use are respected.

Many are familiar with Garrett Hardin’s ‘‘tragedy of the commons,’’ which occurs as a result of overconsumption of resources in a physical commons shared by farmers (Hardin 1968). Some now also worry about what Heller (1998) refers to as the ‘‘tragedy of the anti-commons,’’ which can result when there is an under-consumption or underutilization of resources. **As more** and more **intellectual objects are appropriated from the information commons, and as more** and more of the information commons itself **is fenced off or enclosed through IPRs**, some critics fear that fewer and **fewer intellectual resources will be available for use by ordinary individuals** and that, **as a result, information resources will be underutilized.**

Tavani, Herman T. "Locke, intellectual property rights, and the information commons." Ethics and Information Technology 7.2 (2005): 87-97.

There isn’t equitable access to the commons of medicine, IPP protections consistently favor the well-off creating an inescapable cycle for the underprivileged where branded medicines are too expensive, and generic medicines don’t exist.

**Ahmadiani and Nikfar 16:** The right to health as a basic human right- and access to medicine as a part of it- have been a matter of attention for several decades. Also the responsibilities of different parties- particularly pharmaceutical companies- in realization of this right has been emphasized by World Health Organization. **This is while many companies find no incentive for research and development of medicines related to rare diseases.** Also some **legal structures such as “patent agreements”** clearly **cause huge difficulties for access to medicine in many countries. High prices of brand medicine and no legal production of generics can increase** the **catastrophic costs- as well as morbidity-mortality of medication in lower income countries.** Here we evidently review the current challenges in access to medicine and critically assess its legal roots. How societies/governors can make the pharmaceutical companies responsible is also discussed to have a look on possible future and actions that policy makers- in local or global level- can take. Responsibilities of pharmaceutical companies with regard to human rights have been matter of debates for many years. In August 2008, the Secretary-General of United Nations published a report which mentioned that **over 2 billion people all over the world do not have sufficient access to essential medicine** [[1](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4855755/#CR1)]. The message was clear, **two billion people** (about one third of the world population at the time) **were in danger of death or major harm to their health as a result of the lack of access to essential medicines, either because of not enough attention from pharmaceutical companies, or because the state parties could not fulfill their obligation in regards to essential medicines.** Now after a couple of years it might be still a question that, what the responsibilities of different parties (such as pharmaceutical companies, governments, NGOs, world organizations etc.) are for solving this problem, and how we can assure that the realization of access to essential medicines takes place? This paper will discuss these questions briefly from a human rights perspective, and we will try to find and summarize some legal solutions for controversies and complexities in this field. **Huge part of barriers in access to medicine returns to patent law and its consequences.** Although patent law generally has been used for centuries [[2](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4855755/#CR2)], **the manifestation of TRIPS agreement in 1994 turned it to a new form of challenge. This agreement force the World Trade Organization (WTO) members to take action for protecting intellectual property rights, which entails that any patented product should be produced, imported, sold or used under permission of the patent owner** [[3](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4855755/#CR3)]. **This includes medicine, thus the production of each medicine is initiated with a period of monopoly in the market** with the highest possible price. **In this period there will be no low price generic drugs in the market after signing the agreement by one state (for those drugs which are still under patent), and hence, patients should provide the expensive branded medicine either out of pocket or** by using their **insurance. The problem will rise** up when it comes to a developing country **where population not only have lower economic status, but also lower health status and higher needs to medicine.** According to WHO, life expectancy in developed countries was 1.7 fold higher than developing countries in 2002, showing a 32-years gap in life expectancy between these societies [[4](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4855755/#CR4)]. Also, data shows that infectious diseases such as TB have a negative relationship with GDP per capita of the country [[5](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4855755/#CR5)] (also see Fig [1](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4855755/figure/Fig1/)). These health measures make it obvious that **in developing countries there is a higher need to medical technologies which many of them are under patent.** At the same time, **health insurance coverage is usually poor in these countries and patients often have to pay for the branded medicine out of their own pockets. Evidence shows that the lower the national income is, the higher the out of pocket share of health spending will be** [[6](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4855755/#CR6)]. With higher needs and lower economic ability, providing branded medicine will result in a large load of expenditure for states, catastrophic expenditures for patients [[7](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4855755/#CR7)] and increase of mortality and/or morbidity because of low access to medicine (see Fig [2](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4855755/figure/Fig2/)).

Ahmadiani, Saeed, and Shekoufeh Nikfar. “Challenges of access to medicine and the responsibility of pharmaceutical companies: a legal perspective.” *Daru : journal of Faculty of Pharmacy, Tehran University of Medical Sciences* vol. 24,1 13. 4 May. 2016, doi:10.1186/s40199-016-0151-z

**The very definition of medicines indicates it is a means by which an individual can have a fulfilling life. The failure to recognize others in the community as equally deserving of that right, while keeping it for oneself for the purposes of maintaining one’s own life of fulfillment, is a form of misrecognition  and a violation of the commons . WHO:**

**The WHO** Constitution (1946) **envisages “…the highest attainable standard of health as a fundamental right of every human being.” Understanding health as a human right creates a legal obligation on states to ensure access to timely, acceptable, and affordable health care of appropriate quality as well as to providing for the underlying determinants of health**, such as safe and potable water, sanitation, food, housing, health-related information and education, and gender equality. **A States’ obligation to support the right to health – including through the allocation of “maximum available resources”** to progressively realise this goal - **is reviewed through** various **international human rights mechanisms, such as the Universal Periodic Review, or the Committee on Economic, Social and Cultural Rights.** In many cases, the right to health has been adopted into domestic law or Constitutional law. **A rights-based approach** to health **requires that health policy** and programmes **must prioritize the needs of those furthest behind first towards greater equity**, a principle that has been echoed in the recently adopted 2030 Agenda for Sustainable Development and Universal Health Coverage. (1) **The right to health must be enjoyed without discrimination on the grounds of** race, age, ethnicity or **any** other **status. Non-discrimination and equality requires states to take steps to redress any discriminatory** law, **practice** or policy. Another feature of rights-based approaches is meaningful participation. Participation means ensuring that national stakeholders – including non-state actors such as non-governmental organizations – are meaningfully involved in all phases of programming: assessment, analysis, planning, implementation, monitoring and evaluation. “The right to the highest attainable standard of health” implies a clear set of legal obligations on states to ensure appropriate conditions for the enjoyment of health for all people without discrimination. The right to health is one of a set of internationally agreed human rights standards, and is inseparable or ‘indivisible’ from these other rights. This means **achieving the right to health is** both **central to**, and dependent upon, **the realisation of other human rights**, to food, housing, work, education, information, and participation. The right to health, as with other rights, includes both freedoms and entitlements: Freedoms include the right to control one’s health and body (for example, sexual and reproductive rights) and to be free from interference (for example, free from torture and non-consensual medical treatment and experimentation). **Entitlements include the right to a system of health protection that gives everyone an equal opportunity to enjoy the highest attainable level of health.** Focus on disadvantaged populations Disadvantage and **marginalization serve to exclude certain populations in societies from enjoying good health.** Three of the world’s most fatal communicable diseases – malaria, HIV/AIDS and tuberculosis – disproportionately affect the world’s poorest populations, and in many cases are compounded and exacerbated by other inequalities and inequities including gender, age, sexual orientation or gender identity and migration status. Conversely the burden of non-communicable diseases – often perceived as affecting high-income countries – is increasing disproportionately among lower-income countries and populations, and is largely associated with lifestyle and behaviour factors as well as environmental determinants, such as safe housing, water and sanitation that are inextricably linked to human rights. **A focus on disadvantage also reveals evidence of those who are exposed to greater rates of ill-health and face significant obstacles to accessing quality and affordable healthcare, including indigenous populations.** While data collection systems are often ill-equipped to capture data on these groups, reports show that these populations have higher mortality and morbidity rates, due to noncommunicable diseases such as cancer, cardiovascular diseases, and chronic respiratory disease. **These populations may also be the subject of** laws and **policies that further compound their marginalization and make it harder for them to access healthcare** prevention, **treatment**, rehabilitation and care services.

WHO. “Human rights and health.” 29 December 2017.  https://www.who.int/news-room/fact-sheets/detail/human-rights-and-health.