Whereas, Environmental health is defined as the science and practice of preventing the direct and indirect adverse effects of hazardous agents on health and wellbeing; and

Whereas, A 2018 report by the World Health Organization (WHO) on the burden of disease from environmental risks estimated that approximately thirteen million deaths worldwide could be attributed to preventable environmental factors and 24% of global deaths were due to modifiable environmental factors; and

Whereas, Environmental justice is defined as the principle that all people and communities regardless of race, color, national origin, or income, are entitled to equal protection by environmental and public health laws and regulations, while environmental injustice describes environmental laws, regulations and policies that overly affect a group of people resulting in greater exposure to environmental hazards; and

Whereas, Environmental racism refers to a type of environmental injustice in which the racial and ethnic contexts of environmental regulations and policies, exposures, support structures, and health outcomes cause inequitable environmental hazards for some racial groups; and

Whereas, Low-income and minoritized communities are burdened by environmental injustice in that they reside in areas with higher environmental exposures, reduced preventive measures, and limited medical intervention, further exacerbating health outcome disparities; and

Whereas, The enactment of exclusionary housing policies, including zoning ordinances, restrictive covenants, blockbusting, steering, and redlining, purposefully created racial segregation, exposed Black communities to environmental pollutants and targeting for construction of toxin-releasing facilities, isolated them from essential health resources such as healthy food options, hospitals, and green spaces, and permitted health inequities to concentrate in disadvantaged low-income neighborhoods; and

Whereas, The environmental justice and fair housing collaboration between the Environmental Protection Agency (EPA) and U.S. Department of Housing and Urban Development (HUD) remains inadequate due to insufficient action to provide non-discriminatory and affordable housing units in locations without risk of environmental health exposures; and

Whereas, A combination of inequitable land-use policies, lack of environmental regulation and enforcement, and market forces in petrochemical and heavy metal industries have contributed to the perpetuation of poverty and worse health outcomes in minoritized populations; and

Whereas, Proximity to and exposure to hazards from the oil and gas, plastics, animal production, chemical manufacturing, endocrine-disrupting chemicals, and metal industries have...
been strongly linked to at least one of the following: neural tube defects, preterm birth, low-birth
weight, diffuse interstitial lung fibrosis, chronic bronchitis, asthma exacerbation, diabetes,
hypertension secondary to chronic inflammation, pneumonia, reduced child cognition from
heavy metal exposure, neurologic diseases, cancers, hyperlipidemia, and thyroid disease\textsuperscript{19-28}; and

Whereas, Closures of industrial sites and reductions in pollution have been linked to improved
fertility and reduced preterm births and respiratory hospitalizations\textsuperscript{29-31}; and

Whereas, Recent natural disasters such as hurricanes, the over 1,500 oil spills from the Dakota
Access Pipeline and the Keystone Pipeline in the last decade alone, the Texas freeze, and
states’ responses to these natural disasters perpetuate environmental injustice by
disproportionately affecting predominantly minoritized and low-income communities\textsuperscript{32-37}; and

Whereas, The health of American Indian tribes depends on essential natural resources that
have either been depleted and/or contaminated by mining and oil corporations, leading to
adverse health outcomes\textsuperscript{38-41}; and

Whereas, Government agencies have failed to act on current policy and integrate current
environmental science research or expertise into ongoing environmental regulations and public
health initiatives, resulting in continued and amplified environmental hazards and failing to
protect people, especially in Black and American Indian communities, from known and
predictable environmental health dangers\textsuperscript{42-49}; and

Whereas, Climate change represents an important tenet of environmental health that can
significantly impact public and community health\textsuperscript{50}; and

Whereas, The United States healthcare system alone is responsible for 10% of national
greenhouse gas emissions and, if it were its own country, it would be the 13th largest producer
of greenhouse gas emissions in the world\textsuperscript{50,51}; and

Whereas, Extreme weather and climate events have significantly increased healthcare spending
in the United States, with \$14 billion in additional spending through 760,000 additional patient
encounters and 1,689 premature deaths between 2000 and 2009\textsuperscript{52-53}; and

Whereas, The Intergovernmental Panel on Climate Change (IPCC) has determined it is possible
to avoid warming past 1.5°C above pre-industrial levels by 2100 if extreme measures are taken
to curtail anthropogenic emissions\textsuperscript{54}; and

Whereas, If global warming exceeds 1.5°C, the estimated global effects include 92,207
additional heat-related deaths per year by 2030, 350 million more humans exposed to severe
heat by 2050, and 31 to 69 million humans exposed to flooding from sea level rise by 2100\textsuperscript{54}; and

Whereas, Compared to no action, limiting global warming to less than 1.5°C would result in
~50% lower annual health-related costs and prevention of ~50% of infectious disease cases in
the United States by 2100\textsuperscript{52,53}; and

Whereas, The IPCC has estimated that limiting global warming to 1.5°C would require “global
net human-caused emissions of carbon dioxide to fall by about 45 percent from 2010 levels by
2030, and reach net zero by approximately 2050”\textsuperscript{54}, and
Whereas, IPCC defines net zero emissions as a state where anthropogenic emissions of greenhouse gases (GHG) are balanced by anthropogenic removals of GHG over a specific time period; and

Whereas, Setting emissions targets is an essential part of carbon abatement, and many non-profit organizations, large corporations, and countries have committed to carbon neutrality for their business operations by a date certain in order to improve their business efficiencies and to foster the development of carbon neutral practices; and

Whereas, Multiple organizations in the healthcare industry have committed to becoming carbon neutral on or before 2030, including Harvard Medical School and its affiliated hospitals, all University of California campus and medical centers, the Cleveland Clinic, and Kaiser-Permanante; and

Whereas, Other professional organizations, including the Association of Energy Services Professionals, and International Federation of Medical Students’ Associations have committed to making their conferences carbon neutral; and

Whereas, Our AMA has set discrete benchmark dates for achieving goals in other settings, including child blood lead levels (H-60.924), accreditation of health care service providers in jails (D-430.997), and disaggregation of demographic data (H-350.954); and

Whereas, Our AMA recognizes that racism, in all its forms, is an urgent public health threat, and has pledged to work to combat the adverse health effects of racism (H-65.952); and

Whereas, Our AMA has substantial policy recognizing the impacts of climate change, committing to sustainable business operations, emphasizing the importance of physician leadership regarding climate change, encouraging the study of environmental causes of disease, and encouraging other stakeholders in healthcare to practice environmental responsibility, but has no explicit emissions goal and no way to account for progress towards environmental sustainability (H-135.938, H-135.923, G-630.100, D-135.997, H-135.973); therefore be it

RESOLVED, That our American Medical Association amend Policy D-135.997, “Research into the Environmental Contributors to Disease,” by addition and deletion to read as follows:

Research into the Environmental Contributors to Disease and Advocating for Environmental Justice D-135.997

Our AMA will (1) advocate for greater public and private funding for research into the environmental causes of disease, and urge the National Academy of Sciences to undertake an authoritative analysis of environmental causes of disease; (2) ask the steering committee of the Medicine and Public Health Initiative Coalition to consider environmental contributors to disease and environmental racism as a priority public health issue; (3) encourage federal, state, and local agencies to address and remediate environmental injustice, environmental racism, and all other environmental conditions that are adversely impacting health, especially in marginalized communities; and (4) lobby Congress to support ongoing initiatives that include reproductive health outcomes and development particularly in minority populations in Environmental Protection Agency Environmental Justice policies (Modify Current HOD Policy); and be it further
RESOLVED, That our AMA commit to reaching net zero emissions for its business operations by 2030, and remain net zero or net negative, as defined by a carbon neutral certifying organization (Directive to Take Action); and be it further

RESOLVED, That our AMA create educational programs for and encourage the United States healthcare system, including but not limited to hospitals, clinics, ambulatory care centers, and healthcare professionals, to decrease emissions to half of 2010 levels by 2030 and become net zero by 2050, and remain net zero or negative, as defined by a carbon neutral certifying organization (Directive to Take Action); and be it further

RESOLVED, That our AMA report the progress on implementing this resolution at each Annual Meeting hereafter. (Directive to Take Action)

Fiscal Note: Not yet determined

Received: 10/11/22

REFERENCES:

RESOLVED, That our AMA commit to reaching net zero emissions for its business operations by 2030, and remain net zero or net negative, as defined by a carbon neutral certifying organization (Directive to Take Action); and be it further

RESOLVED, That our AMA create educational programs for and encourage the United States healthcare system, including but not limited to hospitals, clinics, ambulatory care centers, and healthcare professionals, to decrease emissions to half of 2010 levels by 2030 and become net zero by 2050, and remain net zero or negative, as defined by a carbon neutral certifying organization (Directive to Take Action); and be it further

RESOLVED, That our AMA report the progress on implementing this resolution at each Annual Meeting hereafter. (Directive to Take Action)

Fiscal Note: Not yet determined

Received: 10/11/22

REFERENCES:


51. Blumenthal, D., Seervai, S. To be high performing, the U.S. health system will need to adapt to climate change. To the Point: The Commonwealth Fund. *Apr. 18, 2018.*


RELEVANT AMA POLICY

Global Climate Change and Human Health H-135.938

Our AMA:
1. Supports the findings of the Intergovernmental Panel on Climate Change's fourth assessment report and concurs with the scientific consensus that the Earth is undergoing adverse global climate change and that anthropogenic contributions are significant. These climate changes will create conditions that affect public health, with disproportionate impacts on vulnerable populations, including children, the elderly, and the poor.
2. Supports educating the medical community on the potential adverse public health effects of global climate change and incorporating the health implications of climate change into the spectrum of medical education, including topics such as population displacement, heat waves and drought, flooding, infectious and vector-borne diseases, and potable water supplies.
3. (a) Recognizes the importance of physician involvement in policymaking at the state, national, and global level and supports efforts to search for novel, comprehensive, and economically sensitive approaches to mitigating climate change to protect the health of the public; and (b) recognizes that whatever the etiology of global climate change, policymakers should work to reduce human contributions to such changes.
4. Encourages physicians to assist in educating patients and the public on environmentally sustainable practices, and to serve as role models for promoting environmental sustainability.
5. Encourages physicians to work with local and state health departments to strengthen the public health infrastructure to ensure that the global health effects of climate change can be anticipated and responded to more efficiently, and that the AMA's Center for Public Health Preparedness and Disaster Response assist in this effort.
7. Encourages physicians to assess for environmental determinants of health in patient history-taking and encourages the incorporation of assessment for environmental determinants of health in patient history-taking into physician training.
Citation: CSAPH Rep. 3, I-08; Reaffirmation A-14; Reaffirmed: CSAPH Rep. 04, A-19; Reaffirmation: I-19; Modified: Res. 424, A-22
Global Climate Change - The "Greenhouse Effect" H-135.977
Our AMA: (1) endorses the need for additional research on atmospheric monitoring and climate simulation models as a means of reducing some of the present uncertainties in climate forecasting; (2) urges Congress to adopt a comprehensive, integrated natural resource and energy utilization policy that will promote more efficient fuel use and energy production; (3) endorses increased recognition of the importance of nuclear energy's role in the production of electricity; (4) encourages research and development programs for improving the utilization efficiency and reducing the pollution of fossil fuels; and (5) encourages humanitarian measures to limit the burgeoning increase in world population.
Citation: (CSA Rep. E, A-89; Reaffirmed: Sunset Report, A-00; Reaffirmed: CSAPH Rep. 1, A-10; Reaffirmation A-12; Reaffirmed in lieu of Res. 408, A-14)

AMA Advocacy for Environmental Sustainability and Climate H-135.923
Our AMA (1) supports initiatives to promote environmental sustainability and other efforts to halt global climate change; (2) will incorporate principles of environmental sustainability within its business operations; and (3) supports physicians in adopting programs for environmental sustainability in their practices and help physicians to share these concepts with their patients and with their communities.
Citation: Res. 924, I-16; Reaffirmation: I-19

Stewardship of the Environment H-135.973
The AMA: (1) encourages physicians to be spokespersons for environmental stewardship, including the discussion of these issues when appropriate with patients; (2) encourages the medical community to cooperate in reducing or recycling waste; (3) encourages physicians and the rest of the medical community to dispose of its medical waste in a safe and properly prescribed manner; (4) supports enhancing the role of physicians and other scientists in environmental education; (5) endorses legislation such as the National Environmental Education Act to increase public understanding of environmental degradation and its prevention; (6) encourages research efforts at ascertaining the physiological and psychological effects of abrupt as well as chronic environmental changes; (7) encourages international exchange of information relating to environmental degradation and the adverse human health effects resulting from environmental degradation; (8) encourages and helps support physicians who participate actively in international planning and development conventions associated with improving the environment; (9) encourages educational programs for worldwide family planning and control of population growth; (10) encourages research and development programs for safer, more effective, and less expensive means of preventing unwanted pregnancy; (11) encourages programs to prevent or reduce the human and environmental health impact from global climate change and environmental degradation; (12) encourages economic development programs for all nations that will be sustainable and yet nondestructive to the environment; (13) encourages physicians and environmental scientists in the United States to continue to incorporate concerns for human health into current environmental research and public policy initiatives; (14) encourages physician educators in medical schools, residency programs, and continuing medical education sessions to devote more attention to environmental health issues; (15) will strengthen its liaison with appropriate environmental health agencies, including the National Institute of Environmental Health Sciences (NIEHS); (16) encourages expanded funding for environmental research by the federal government; and (17) encourages family planning through national and international support.

AMA to Protect Human Health from the Effects of Climate Change by Ending its Investments in Fossil Fuel Companies H-135.921
1. Our AMA will: (a) choose for its commercial relationships, when fiscally responsible, vendors, suppliers, and corporations that have demonstrated environmental sustainability practices that seek to minimize their fossil fuels consumption; and (b) support efforts of physicians and other health professional associations to proceed with divestment, including to create policy analyses, support continuing medical education, and to inform our patients, the public, legislators, and government policy makers.
2. Our AMA: (a) declares that climate change is an urgent public health emergency, and calls upon all governments, organizations, and individuals to work to avert catastrophe; (b) urges all health and life insurance companies, including those that provide insurance for medical, dental, and long-term care, to
work in a timely, incremental, and fiscally responsible manner to end all financial investments or relationships (divestment) with companies that generate the majority of their income from the exploration for, production of, transportation of, or sale of fossil fuels; and (c) will send letters to the nineteen largest health or life insurance companies in the United States to inform them of AMA policies concerned with climate change and with fossil fuel divestments, and urging these companies to divest.

Citation: BOT Rep. 34, A-18; Appended: Res. 607, A-22

Support of Clean Air and Reduction in Power Plant Emissions H-135.949
1. Our AMA supports (a) federal legislation and regulations that meaningfully reduce the following four major power plant emissions: mercury, carbon dioxide, sulfur dioxide and nitrogen oxide; and (b) efforts to limit carbon dioxide emissions through the reduction of the burning of coal in the nation's power generating plants, efforts to improve the efficiency of power plants and continued development, promotion, and widespread implementation of alternative renewable energy sources in lieu of carbon-based fossil fuels.
2. Our AMA will: (a) support the Environmental Protection Agency's proposal, under the Clean Air Act, to regulate air quality for heavy metals and other air toxins emitted from smokestacks. The risk of dispersion through air and soil should be considered, particularly for people living downwind of smokestacks; and (b) urge the EPA to finalize updated mercury, cadmium, and air toxic regulations for monitoring air quality emitted from power plants and other industrial sources, ensuring that recommendations to protect the public's health are enforceable.

Citation: Res. 429, A-03; Reaffirmation I-07; Reaffirmed in lieu of Res. 526, A-12; Reaffirmed: Res. 421, A-14; Modified: Res. 506, A-15; Modified: Res. 908, I-17; Appended: Res. 401, A-22

EPA and Green House Gas Regulation H-135.934
1. Our AMA supports the Environmental Protection Agency's authority to promulgate rules to regulate and control green house gas emissions in the United States.
2. Our AMA: (a) strongly supports evidence-based environmental statutes and regulations intended to regulate air and water pollution and to reduce greenhouse gas emissions; and (b) will advocate that environmental health regulations should only be modified or rescinded with scientific justification.

Citation: Res. 925, I-10; Reaffirmed in lieu of Res. 526, A-12; Reaffirmed: Res. 421, A-14; Appended: Res. 523, A-17

Conservation, Recycling and Other "Green" Initiatives G-630.100
AMA policy on conservation and recycling include the following: (1) Our AMA directs its offices to implement conservation-minded practices whenever feasible and to continue to participate in "green" initiatives. (2) It is the policy of our AMA to use recycled paper whenever reasonable for its in-house printed matter and publications, including JAMA, and materials used by the House of Delegates, and that AMA printed material using recycled paper should be labeled as such. (3) During meetings of the American Medical Association House of Delegates, our AMA Sections, and all other AMA meetings, recycling bins, where and when feasible, for white (and where possible colored) paper will be made prominently available to participants.


Disaggregation of Demographic Data Within Ethnic Groups H-350.954
1. Our AMA supports the disaggregation of demographic data regarding: (a) Asian-Americans and Pacific Islanders in order to reveal the within-group disparities that exist in health outcomes and representation in medicine; and (b) ethnic groups in order to reveal the within-group disparities that exist in health outcomes and representation in medicine.
2. Our AMA: (a) will advocate for restoration of webpages on the Asian American and Pacific Islander (AAPI) initiative (similar to those from prior administrations) that specifically address disaggregation of health outcomes related to AAPI data; (b) supports the disaggregation of data regarding AAPIs in order to reveal the AAPI ethnic subgroup disparities that exist in health outcomes; (c) supports the disaggregation of data regarding AAPIs in order to reveal the AAPI ethnic subgroup disparities that exist in representation in medicine, including but not limited to leadership positions in academic medicine; and (d) will report back at the 2020 Annual Meeting on the issue of disaggregation of data regarding AAPIs (and other ethnic subgroups) with regards to the ethnic subgroup disparities that exist in health outcomes and representation in medicine, including leadership positions in academic medicine.

Citation: Res. 001, I-17; Appended: Res. 403, A-19
Reducing Lead Poisoning H-60.924

1. Our AMA: (a) supports regulations and policies designed to protect young children from exposure to lead; (b) urges the Centers for Disease Control and Prevention to give priority to examining the current weight of scientific evidence regarding the range of adverse health effects associated with blood lead concentrations below the current "level of concern" in order to provide appropriate guidance for physicians and public health policy, and encourage the identification of exposure pathways for children who have low blood lead concentrations, as well as effective and innovative strategies to reduce overall childhood lead exposure; (c) encourages physicians and public health departments to screen children based on current recommendations and guidelines and to report all children with elevated blood levels to the appropriate health department in their state or community in order to fully assess the burden of lead exposure in children. In some cases this will be done by the physician, and in other communities by the laboratories; (d) promotes community awareness of the hazard of lead-based paints; and (e) urges paint removal product manufacturers to print precautions about the removal of lead paint to be included with their products where and when sold.

2. Our AMA will call on the United States government to establish national goals to: (a) ensure that no child has a blood lead level >5 g/dL (>50 ppb) by 2021, and (b) eliminate lead exposures to pregnant women and children, so that by 2030, no child would have a blood lead level >1 g/dL (10 ppb).

3. Our AMA will call on the United States government in all its agencies to pursue the following strategies to achieve these goals: (a) adopt health-based standards and action levels for lead that rely on the most up-to-date scientific knowledge to prevent and reduce human exposure to lead, and assure prompt implementation of the strongest available measures to protect pregnant women and children from lead toxicity and neurodevelopmental impairment; (b) identify and remediate current and potential new sources of lead exposure (in dust, air, soil, water and consumer products) to protect children before they are exposed; (c) continue targeted screening of children to identify those who already have elevated blood lead levels for case management, as well as educational and other services; (d) eliminate new sources of lead introduced or released into the environment, which may entail banning or phasing out all remaining uses of lead in products (aviation gas, cosmetics, wheel weights, industrial paints, batteries, lubricants, and other sources), and the export of products containing lead, and setting more protective limits on emissions from battery recyclers and other sources of lead emissions; (e) provide a dedicated funding stream to enhance the resources available to identify and eliminate sources of lead exposure, and provide educational, social and clinical services to mitigate the harms of lead toxicity, particularly to protect and improve the lives of children in communities that are disproportionately exposed to lead; and (f) establish an independent expert advisory committee to develop a long-term national strategy, including recommendations for funding and implementation, to achieve the national goal of eliminating lead toxicity in pregnant women and children, defined as blood lead levels above 1 g/dL (10 ppb).

4. Our AMA supports requiring an environmental assessment of dwellings, residential buildings, or child care facilities following the notification that a child occupant or frequent inhabitant has a confirmed elevated blood lead level, to determine the potential source of lead poisoning, including testing the water supply.

Citation: CCB/CLRPD Rep. 3, A-14; Appended: Res. 926, I-16; Appended: Res. 412, A-17

Pollution Control and Environmental Health H-135.996

Our AMA supports (1) efforts to alert the American people to health hazards of environmental pollution and the need for research and control measures in this area; and (2) its present activities in pollution control and improvement of environmental health.


Research into the Environmental Contributors to Disease D-135.997

Our AMA will (1) advocate for greater public and private funding for research into the environmental causes of disease, and urge the National Academy of Sciences to undertake an authoritative analysis of environmental causes of disease; (2) ask the steering committee of the Medicine and Public Health Initiative Coalition to consider environmental contributors to disease as a priority public health issue; and (3) lobby Congress to support ongoing initiatives that include reproductive health outcomes and development particularly in minority populations in Environmental Protection Agency Environmental Justice policies.

Citation: Res. 402, A-03; Appended: Res. 927, I-11; Reaffirmed in lieu of: Res. 505, A-19
Environmental Health Programs H-135.969
Our AMA (1) urges the physicians of the United States to respond to the challenge for a clean environment individually and through professional groups by becoming the spokespersons for environmental stewardship; and (2) encourages state and county medical societies to establish active environmental health committees.
Citation: Res. 124, A-90; Reaffirmed: Sunset Report, I-00; Reaffirmed: CSAPH Rep. 1, A-10; Reaffirmed: CSAPH Rep. 01, A-20

Federal Programs H-135.999
The AMA believes that the problem of air pollution is best minimized through the cooperative and coordinated efforts of government, industry and the public. Current progress in the control of air pollution can be attributed primarily to such cooperative undertakings. The Association further believes that the federal government should play a significant role in these continuing efforts. This may be done by federal grants for (1) the development of research activity and (2) the encouragement of local programs for the prevention and control of air pollutants.
Citation: BOT Rep. M, A-63; Reaffirmed: CLRPD Rep. C, A-88; Reaffirmed: Sunset Report, I-98; Reaffirmation I-06; Reaffirmation I-07; Reaffirmed: CSAPH Rep. 01, A-17

Racism as a Public Health Threat H-65.952
1. Our AMA acknowledges that, although the primary drivers of racial health inequity are systemic and structural racism, racism and unconscious bias within medical research and health care delivery have caused and continue to cause harm to marginalized communities and society as a whole.
2. Our AMA recognizes racism, in its systemic, cultural, interpersonal, and other forms, as a serious threat to public health, to the advancement of health equity, and a barrier to appropriate medical care.
3. Our AMA encourages the development, implementation, and evaluation of undergraduate, graduate, and continuing medical education programs and curricula that engender greater understanding of: (a) the causes, influences, and effects of systemic, cultural, institutional, and interpersonal racism; and (b) how to prevent and ameliorate the health effects of racism.
4. Our AMA: (a) supports the development of policy to combat racism and its effects; and (b) encourages governmental agencies and nongovernmental organizations to increase funding for research into the epidemiology of risks and damages related to racism and how to prevent or repair them.
5. Our AMA will work to prevent and combat the influences of racism and bias in innovative health technologies.
Citation: Res. 5, I-20; Reaffirmed: Res. 013, A-22; Modified: Speakers Rep., A-22