Climate Change

Climate change is a Public Health Crisis .

3.6 billion people are exposed to climate change.
Over 1 billion workers are exposed to high heat and one third may have adverse health outcomes. Between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year from undernutrition, malaria, diarrhea and heat stress alone. The UN reports in the last half century there were 2 million deaths and 4.3 trillion economic damage.

Climate change programs is to limit global warming to no more than 1,5 degrees Celsius, Reduce greenhouse gas emissions aimed at carbon neutrality by 2050, and support the rapid implementations and incentivization of clean energy solution, and significant investments in climate resilience through a climate justice lens.

Climate changes can have profound effects of our quality of life. There is a higher mortality and morbidity from heat stress. There is an increase in mortality from severe weather conditions. There is an increase in vector born diseases. There is food insecurity with a decline in agricultural output, resulting in higher prices. Work capacity is reduced with a reduced production of goods. There is an increase in maternal deaths, adverse pregnancy outcomes and mental health .

Heat, drought, wild fires hurricanes and severe flooding can lead to the emergence of infectious diseases. There are changes in pathogens, vectors, resulting in people and animal migration. This includes vector born diseases such as West Nile, Zika, Dengue , And malaria. Zoonotic diseases are migratory diseases to include HSN1, and avian influenza. Fungal diseases from soil dwellings include candida auris. There are water born diseases with changes in sea level to include gastroenteritis, soft tissue swelling, sepsis , to include the Vibrio species.

The are environmental impacts with hurricanes, floods, drought, flooding, and endangering Plant and animal species, leading to habitat loss. There can be geopolitical tensions with displacement of people due to weather conditions. Economically, there may damage to infrastructure, homes and business and economic loss. People may have a limited capacity to adjust to social change.

There are those who are more vulnerable, including the poor, those living in poverty and those living outdoors. Those with preexisting medical conditions may have aggravation of their diseases. In addition those vulnerable include woman and children, older people, migrants, indigenous poor, workers and those with disabilities.

Heat related illness include, heat cramps, heat exhaustion and heat stroke. Death may be accelerated in those who are frail. In addition to stress, excessive heat may lead to

respiratory, cardiovascular, diabetes and renal disease, heat excess has been associated with an increase in the number of suicides ,an increase in pressure and anxiety and civil violence. There can be an increase in pollution, toxic substances in the food chain and transmission of disease. Air pollution is associated with an increase in neurotic plaques Which can be seen in patients with Alzheimer's disease, The skin can be affected by air pollution to aggregate acne, hyperpigmentation, atopic dermatitis, psoriasis and others...

There are things we can do to prevent damage from heat.
Be well hydrated, wear light colored and light weight clothing, stay away from the outdoors at times during the day, sun protection, take breaks from the sun, and be aware of medical conditions and medication that can place you vulnerable with excessive heat.

People may experience ECHO-ANXIETY. People may experience feelings of environmental doom. Its effects one's emotional state where people have conflict avoidance and others are hesitant to have children. The American Psychological association report that these individuals may suffer different emotions such as fear, anger, feelings of powerlessness and exhaustion. Those with climate anxiety have experience insomnia in 70% of people.

Air pollution refers to the presence of harmful and excessive quantities of substances in the air. There is a strong link between climate change and air pollutants. The burning of fossil fuels for energy production and transportation, release pollutants in the air. The burning of oil and coal for electricity emits CO2 and other pollutants that have health effects, including respiratory and vascular disease and further effects in the ecosystem and wildlife. . Addressing one can have benefits for the other for a more sustainable environment.

JEWISH VALUES AND CLIMATE CHANGE

We are stewards of the earth with the responsibility to protect the earth and not destroy it. It is part of our TIKUN OLAM. The Hebrew word is Bal Tashchit, do not destroy it. In Deuteronomy 20:19,20 : " The human is a tree of the field". For the farmer there is Shmita (sabbatical year, and Yovel (jubilee year)- At 7 years, let the land rest, and distribution , sustain and have equity.

" See my work, how fine and excellent they are. Now all that I created for your benefit. Think upon this and do not corruptor alter my work, for if you destroy it there is no one to After you to repair it"- Midrash Ecclesiastes 7:28

There are many Jewish organizations that promote Climate Change :
DAYANU , HAZON-PEARLSONE , RAC-NY, ADAMAH. They advocate for carbon foot prints, support renewable energy, and advocate for climate policy.

WHAT CAN YOU DO ?

Advocate for public health and public health resources for health and related outcomes. Look t=for early warning signs and develop emergency response plans. Support legislators. who promote climate policies and laws. We need to be active participants to promote effective remedies with non-discriminatory practices. We should recognize that climate change is caused by anthropogenic emissions (vehicular traffic, heat waste from buildings) of greenhouse gases.

Each one of us can be involved in reducing energy with heat insulation and using solar and wind power. We can limit our carbon footprint by car pooling and use of electric vehicles. We can conserve water by fixing leaks and shorter showers. We can recycle , compost , and reduce waste. We can support sustainable practices. We can plant trees and support conservation efforts and support reforestation efforts. We need to adapt and prepare for extreme weather and disaster relief .

Climate change involves personal growth, and daily action. Channel yWhy is the sky orange?' our creativity in ways that to help and prevent a more sustainable future. What do you say to your child who askes you one morning : " WHY IS THE SKY ORANGE?"

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Climate Change : a few additional notes...

You can think of climate change as hazards and disasters. Hazards are acts of nature like tornados, and volcanos. Disasters is how they affect us as human beings.

In the article, I would emphasize that most of the greenhouse gases are from human activity.

Regarding mental health, in addition to anxiety, depression, fatigue, there is a reported increase in substance uses including alcohol, suicide, and violence.

The mental health effects of climate change challenge us to be more resilient and commit to change. We need to turn our anxiety into action. To assist us, we can reach out to those people and organizations that can give us structure and social support. We need to be more engaged, and being adaptive for our growth and well-being.

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2. Climate change is the most significant threat to human health in the 21st century
(World Health Organization)

3. How do we provide optimal health and treatment in the interaction between humans and the environment?

4. Natural Disasters - volcano eruption, solar variability
Man Made – greenhouse gases, fossil fuel, water vapor

5. Survivability vs Sustainability

6. What is the relationship of climate changes and air pollution ?

7. Global Health:
Epidemiology
Geopolitics
Environmental Justice

8. Health Effects:
Cardiovascular
Neuro degenerative Disease
Infectious Diseases.
Mental Health – Eco- anxiety

9Climate Crisis Action through academic leadership is a call to duty.-
Advocate to be a climate activist- be a climate optimist , occupational health exposure, genetic predisposition.

10What is the role of the ACOEM physician?
Leadership, education, sustainable practices in health care, conduct research ,adaptation to actual or expected climate change, advocate for awareness to promote health care in the community.

11. – Physicians can teach us to mitigate the effects of climate change and global health for a climate clean energy future .

12. What am I doing now that will sustain the heritability of the world ?

13- Thank you