

Potential Impacts Of Climate Change On Kidney Disease, Mental Health, & Underserved Populations

The Year 2023 Was Recognized As:1

Climate change with its extreme weather, heat exposures, and air pollution can increase morbidity and mortality rates for patients with chronic medical conditions.2



The warmest year in recorded history

Record high for greenhouse gas emissions

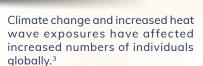
Record high sea level rise

Record low Antarctic ice

A year with more severe weather and resulting destruction to some communities



CLIMATE CHANGE & KIDNEY DISEASE





Heat Waves And Heatstroke Can Cause:3,4

- Acute kidney injuries (AKI)³
- Electrolyte abnormalities such as hyponatremia and hypokalemia due to urinary electrolyte excretion and/or loss through sweat³
- Recurring AKIs which may increase the risk of developing chronic kidney disease³
- Nephrolithiasis and urinary tract infections due to underhydration and low urine volumes3
- Increased emergency department visits and hospitalizations for kidney disease4

CLIMATE CHANGE & MENTAL HEALTH



Potential Mental Health Effects Due To Climate Change:5

- Greater stress including stress-related disorders
- Anxiety
- Despair
- Depression
- Suicidal Ideation



Environmentally Forced Migration:

- May disrupt social ties that normally buffer stressors related to prolonged and acute climate events.6
- "Eco-Anxiety" coined by Glenn Albrecht, describes chronic fear of environmental doom and feelings of anxiety, or grief related to climate change and worry about the future and expected negative changes.6,7



Environmental Disasters:

Primary impact of environmental disasters and associated trauma and grief can lead to:6

- Impaired sleep
- Decreased psychological health
- Interference in cognitive functioning including decreased memory, executive function, and the ability to concentrate
- Increased high-risk behaviors including domestic violence, alcoholism, and substance-abuse

Secondary effects on mental health may be due to environmental and ecological disruptions such as:6

- Physical and social infrastructure damage
- Food/water shortage
- Conflict
- Displacement
- Decreased physical health

UNDERSERVED POPULATIONS

How Does Climate Change Impact Underserved Populations & Health Equity?

Marginalized and underserved communities are vulnerable to health risks secondary to climate change such as poor air quality, increased temperatures, and extreme weather.8



Image Source: The Fourth National Climate Assessment⁹

Communities Of Color

Some communities in risk-prone areas face cumulative exposure to multiple pollutants. Adaptation plans can improve healthcare access and help to address social inequities.



Heat stroke and illness are a greater threat to children than adults. Monitoring their exertion and hydration can lessen this risk.

and checking in on seniors can save lives.

Low Income Communities

Extreme events that cause

power outages or require

evacuation can place older

adults in danger. Proper

emergency communication

Flooding and crowded shelter conditions can lead to physical and mental illness. Disaster management plans can help those with limited resources to be resilient.

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The information provided through NephU is intended for the educational benefit of health care professionals and others who support care for those with kidney disease and other related conditions. It is not intended as, nor is it a substitute for, medical care, advice, or professional diagnosis. Health care professionals should use their independent judgement when reviewing NephUs educational resources. Users seeking medical advice should consult with a health care professional.

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