

Climate change is affecting eye health equity



PHOTO CREDIT: Michael Amendolia, Kenya

Louisa Syrett | TimestamP

There are 1.1 billion people with vision loss worldwide, and 90% of this occurs in low and middle income countries. Furthermore, women and girls make up 55% of the world's blind and vision impaired. The socio-economic and cultural factors that make women and girls in low and middle income countries more susceptible to poverty, are the same factors that put them at greater risk of vision loss and climate change related events. In fact, [climate change is having an adverse effect on eye health equity.](#)

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What is the correlation between climate change and eye health?

Climate change is having a direct impact on human health. According to the [Royal Australian College of General Practitioners](#), climate change has increased the rate of morbidity due to a rise in temperatures and resulting heat-waves, especially for the vulnerable, including the elderly people and those with heart and breathing conditions.

What's more is that climate change is affecting people's eye health, as the human eye is susceptible to minor changes in environmental factors. This means that high temperatures and low rainfall can increase rates of [trachoma](#) infections. Plus, rising UV exposure could lead to hundreds and thousands of additional [cataract](#) cases by the year 2050.

Vitamin deficiency is also expected to rise with predicted increases in food insecurity. This means people may not have access to [vitamins and minerals essential for good eye health](#). Food insecurity, especially a lack of availability of fresh produce, can also lead to [diabetes](#) and [diabetic retinopathy](#).

Air pollution is another environmental factor of concern. An increase in pollutants from traffic can cause severe allergic eye reactions, which in turn can lead to [glaucoma](#) and age-related [macular degeneration](#).

Furthermore, extreme weather events and natural disasters can lead to an increase in acute and protracted eye injuries and disrupt eye health delivery in remote areas of the world, where eye health services are already scarce.

While all countries – high-, middle- and low-income – will experience the health impacts of climate change, the adverse effects will be disproportionately felt by communities that are already under-resourced, marginalised, and ill-equipped to handle natural disasters or adapt to environmental changes.



Photographer: Michael Amendolia

How is climate change affecting eye health equity?

We have already established that the vast majority of the world's blind and visually impaired live in remote and under-resourced parts of the world. And climate change disproportionately affects the world's most marginalised communities and countries, so it's no surprise that there is a correlation between climate change and eye health inequity.

Some communities are able to access primary healthcare services for the first time in the immediate aftermath of a natural disaster because of an influx of international emergency medical teams. However, despite disaster-related diagnoses for eye health being very common following an extreme climate-related weather event or natural disaster, emergency humanitarian response teams rarely include eye care specialists in their field operations. As a result, injuries are not properly treated and are more likely to develop into chronic conditions and lead to disability.

As a result of climate change, extreme weather-related hazards are occurring more frequently, and up to 80% of people displaced from their home and community are women and girls. This also puts them at a greater risk of injury or death in emergency situations because their mobility is hampered, with them being the main caregivers for children and other family members, including those with a vision impairment.

[A study of 141 countries](#) found that women are more likely to be killed during disasters, and at an earlier age; particularly in impoverished communities.



Photographer: Barry Orr

Who is affected the most by climate change?

It is low- and middle-income countries that are most affected by climate change. They are the most likely to experience poor health and economic outcomes, including below average life expectancy, high infant mortality rates, low educational outcomes, infrastructure degradation, and poor health outcomes.

Countries where we work, such as Eritrea, Ethiopia, Pakistan, Bangladesh, Vietnam, and Nepal suffer high rates of illnesses and infections due to lack of access to clean water, malnutrition, and lack of access to quality medical care for a large part of their population that lives in remote communities where provisions aren't readily available.

[According to a report into climate change by the United Nations](#) and its impact on inequality and poverty, the effects of climate change will be experienced in varying degrees by different countries and within each country itself. For instance, even in high-income countries, people living in marginalised communities are more likely to be exposed to climate change and suffer its implications. Many Aboriginal and Torres Strait Islander communities living in remote parts of Australia are especially vulnerable to climate change.



Photographer: Michael Amendolia

How can we prevent climate change from creating inequity?

If we are to prevent climate change from worsening eye health inequity, we have to make a concerted effort to break the cycle that exacerbates women and girls vulnerability to socioeconomic and environmental factors. In order to do this, we must focus on the following:

Prevention

Implement sustainable and inclusive health care services in high-risk environments and communities to address chronic eye health issues and reduce both the vulnerability of women and girls, as well as the impact of climate change.

Response

Ensure eye health specialists are included in emergency humanitarian response teams to address disaster-related eye injuries and support patients with non-disaster related eye health conditions, particularly women and girls who often fall through the cracks.

Inclusion

Ensure women are included in developing the prevention and response by giving women at all levels access to health care decision-making opportunities.



Photographer: Michael Amendolia

The Fred Hollows Foundation's commitment to eye health equity

- The Fred Hollows Foundation believes good eye health and access to eye health care is part of every human's fundamental right to good health and wellbeing. This means that all people should have access to quality, efficient, and affordable eye health care.
- The Foundation is committed to ensuring that our programs consider the needs of the poorest and most marginalised in the places where we work, including the complexities relating to issues of inequity in access to eye health care and appropriate responses. To fulfil this commitment, we have adopted the GAPSED+ equity organising framework.
- We will use the GAPSED+ organising framework to understand who is most marginalised and excluded in terms of access to eye care and ensure that our work targets the needs and respects the human dignity of these specific groups and communities. We will actively engage with those groups and communities, and their representatives, in decisions about their eye health to support their empowerment.
- All new projects, programs and initiatives will be required to use the GAPSED+ equity organising framework during the conduct of situational analyses and project development to ensure issues of inequity are effectively identified and addressed. Project review and approval processes will be used to ensure this occurs, and that considerations of equity are balanced in our decision making with considerations of value for money programming and how to optimise our contribution to ending avoidable blindness and vision impairment, the local context, and the needs and circumstances of our implementing partners.
- The Foundation is committed to assessing and implementing ways to mainstream equity and inclusion across our projects and supporting advocacy strategies that

increase equity of access for all people. We will monitor the impact of our programming in reducing eye health inequity.

Learn more

Interested in learning more and getting involved in The Foundation's sight-restoring work?

- [Discover 10 ways to promote climate action and sustainability in eye health](#)
 - [Find out how we are investing in the global eye health workforce to achieve equity](#)
 - [Learn about innovative models of equitable and sustainable eye care](#)
 - [See how we are promoting women in leadership within eye health](#)
 - [Read about the importance of gender equity](#)
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Author bio



Louisa is the Global Advocacy Advisor at The Fred Hollows Foundation, and has over 15 years' experience in senior roles, including six years at the British Council (three of those as Director of Partnerships for Palestine) and three years at Save the Children UK. She holds a Bachelor of Arts (Politics and History) from the University of Melbourne and a Masters of Arts (Cyberculture and the Law) from Macquarie University. Louisa is a member of BOND (the UK's International Development body) Sustainable Development Goals Steering Committee, Vice Chair for Sutton Vision, and Vice Chair for the John and Joan Corfield Charitable Trust.