

## Impact of Climate Change on Eye Health

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Several serious eye diseases and health conditions can lead to permanent or some cases, these conditions can lead to blindness. Cataract, pterygium and OSSN are particularly associated with UV exposure. UV-B radiation, in particular, contributes to cataract formation<sup>1</sup>. Pterygium prevalence is linked to UV exposure and particulate matter, while OSSN is commonly observed in regions with high UV radiation, especially near the equator<sup>2</sup>.

Global warming also impacts human health more broadly<sup>3</sup>. Warmer temperatures increase the risk of vector-borne diseases, such as malaria and viral infections like dengue fever<sup>6</sup>. In Bangladesh, climate change is expected to heighten vulnerability to cholera, dengue, cardiovascular and respiratory diseases and malnutrition due to reduced food production (ICDDR<sup>B</sup>)<sup>5</sup>. For example, in April 2014, severe heatwaves led to viral illnesses and gastrointestinal disorders. Climate change also affects mental health; vulnerable populations and those with pre-existing psychiatric conditions are particularly at risk<sup>6</sup>. Beyond health, Bangladesh may experience unpredictable weather patterns, seasonal irregularities and food and water insecurity due to global warming. Some cases, these conditions can lead to blindness. Cataract, pterygium and OSSN are particularly associated with UV exposure. UV-B radiation, in particular, contributes to cataract formation<sup>4</sup>. Pterygium prevalence is linked to UV exposure and particulate matter, while OSSN is commonly observed in regions with high UV radiation, especially near the equator.

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