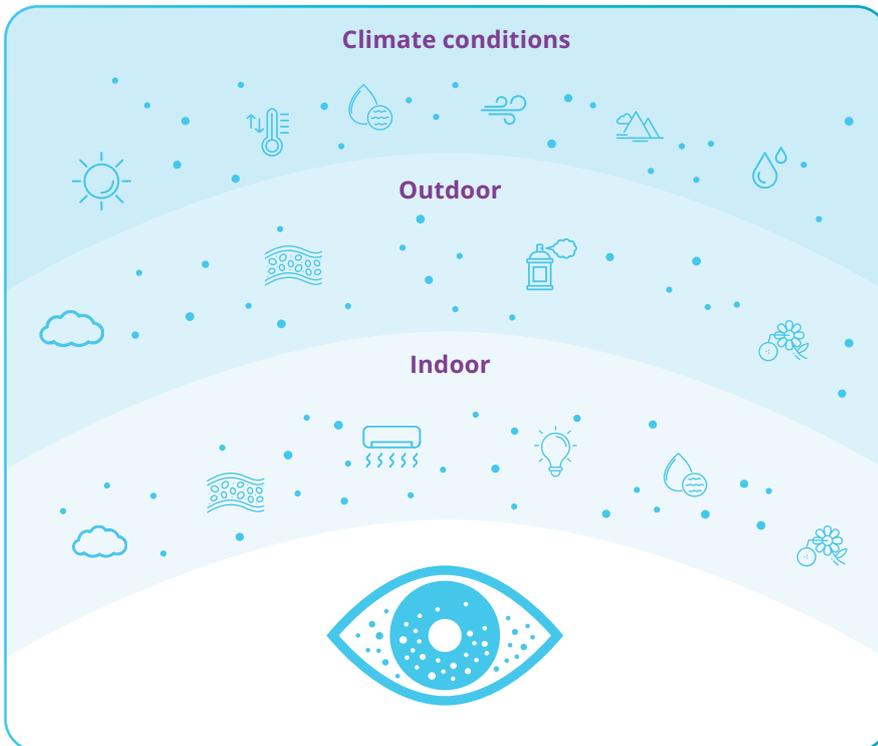


# DED YOU KNOW?

The world we live in has an impact on the ocular surface and contributes to the causes of dry eye disease (DED)<sup>1</sup>



The TFOS Lifestyle Report lists various environmental factors, such as climate, pollutants, and allergens, that can affect the ocular surface<sup>1</sup>



## Climate conditions

- Sunlight
- Temperature
- Humidity
- Wind speed
- Altitude
- Water vapor

## Outdoor

- Gases
- Air pollutants
- Aerosols
- Allergens

## Indoor

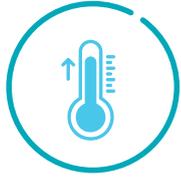
(Home, office, industrial and medical facilities, airplanes, etc)

- Gases
- Air pollutants
- Air conditioning
- Illumination
- Humidity
- Allergens

Many patients with DED experience frequent exacerbation of ocular discomfort due to various environmental stressors.<sup>1</sup>

## A core mechanism of DED involves stress from desiccation\* that damages the ocular surface<sup>1,2</sup>

Environmental conditions may contribute to the tear film alterations that drive this core mechanism of action. Conditions include<sup>1</sup>:



### Higher temperatures

- Increased tear evaporation
- Increased TFBUT
- Altered meibum lipids



### Exposure to nitrogen dioxide

- Decreased TFBUT
- Meibomian gland dysfunction



### Higher humidity

- Meibomian gland loss
- Evaporative DED



### Increased air pollution from burning biomass

- Increased tear film instability
- Ocular surface staining
- Irritating ocular symptoms



### Exposure to allergens

- Tear film instability
- Ocular surface damage



## Indoor and outdoor environmental exposures could be contributing to the signs and symptoms of evaporative DED in your patients

Find out about a treatment option for patients with evaporative DED.

\*Desiccation is the drying of the ocular surface due to tear evaporation exceeding tear production.<sup>2</sup>

TFBUT, tear film breakup time.

**References:** 1. Alves M, Asbell P, Dogru M, et al. TFOS Lifestyle Report: Impact of environmental conditions on the ocular surface. *Ocul Surf.* 2023;29:1-52. doi:10.1016/j.jtos.2023.04.007 2. Bron AJ, de Paiva CS, Chauhan SK, et al. TFOS DEWS II pathophysiology report. *Ocul Surf.* 2017;15(3):438-510. doi:10.1016/j.jtos.2017.05.011