On July 12, AERV and the Tear Film & Ocular Surface Society (TFOS) joined with the vision community and coalition partners (see box next page) in recognizing July as Dry Eye Awareness Month with a Congressional Briefing entitled Dry Eye: An Updated Definition, A Greater Impact on Vision Health, a “Test Your Tears” Dry Eye Screening, and a poster presentation by dry eye clinicians and researchers. The following day, and under the auspices of NAEVR, the speakers and researchers conducted visits with their Congressional delegations. (see next page)

About Dry Eye

Dry eye is one of the most frequent causes of patient visits to eye care providers. This disease has an important impact on healthcare policy since it affects more than 30 million Americans and costs the U.S. healthcare system $3.8 billion, with a $55.4 billion cost to society when productivity is considered. Dry eye occurs when the eye does not produce tears properly or when the tears are not of the correct consistency and evaporate too quickly. For some people, it feels like a speck of sand in the eye, or stinging or burning that does not go away. For others, dry eye can become a painful chronic and progressive condition that leads to blurred vision or even vision loss if it goes untreated. Moderate-to-severe dry eye is associated with significant pain, role limitations, low vitality, poor general health, and often depression.

Dry eye is an important area of vision research funded by the NEI, which has issued a press release recognizing Dry Eye Awareness Month, addressing its research to better understand the causes of the disease and to develop treatments, as well as an updated fact sheet.

About the TFOS DEWS II™ Report

The July 2017 Dry Eye Awareness Month activities were especially poignant, due to the impending July 20 publication of the TFOS Dry Eye Workshop II™ Report (TFOS DEWS II™) in The Ocular Surface journal. In this first re-examination of the topic since the initial TFOS DEWS™ report issued in 2007, TFOS DEWS II™ updates the definition, classification, and diagnosis of dry eye; critically evaluates the epidemiology, pathophysiology, mechanism, and impact of the disease; addresses its management and therapy; and develops recommendations for the design of clinical trials to assess pharmaceutical interventions.

The Briefing faculty reflected experts engaged in development of the TFOS DEWS II™ Report. They highlighted that, although researchers have long known about age, sex, and gender as factors, they are now discovering ethnic and racial differences and the fact that dry eye impacts younger patients. Dry eye can have many causes, including environmental exposure; side-effects from medications; eye surgery (such as laser correction surgery); lid disorders; immune system diseases such as Sjögren’s Syndrome, lupus, or rheumatoid arthritis; contact lens wear; cosmetic use; aesthetic procedures; and an increasingly common cause—staring at computer or video screens for too long without blinking. Speaker highlights include:

Paul Karpecki, OD, FAAO (Director, Cornea Services, Kentucky Eye Institute), who served as moderator, began by asking attendees about the number of hours that they sleep, wear contact lenses, or work on a computer each day—noting that all are dry eye risk factors. He described dry eye’s impact on quality of life in graphic terms, stating that, “Imagine if every day you woke up and were aware of your eyes, like a broken windshield wiper on a car.”

Susan Vitale, PhD, MHS (NEI) described the work of the TFOS DEWS II™ Epidemiology Subcommittee in assessing the prevalence of dry eye and identifying risk factors. “Non-Modifiable” risk factors include age, female sex, Asian race, meibomian gland (oil glands in eyelids) dysfunction, connective tissue diseases, and Sjögren’s Syndrome. “Modifiable” risk factors include: androgen deficiency, computer use, contact lens wear, hematopoietic stem cell transplantation, environmental factors (pollution, low humidity, and sick building syndrome), and medications (antihistamines, antidepressants, anxiolytics, and isoretinoin).

Susan Stone, JD (left) and Maria Zanardo (right), both from Allergan, with Ali Manson (American Optometric Association and Founder, Tear Film & Ocular Surface Society, TFOS) woke up and were aware of your eyes, like a broken windshield wiper on a car.”

Janine Austin-Clayton, MD (NH Associate Director for Research on Women’s Health and Director, Office of Research on Women’s Health, NIH) addressed dry eye implications for women. She acknowledged that sex differences in ocular diseases have been known since the 19th century, and that U.S. women are disproportionately affected by major eye conditions such as age-related macular degeneration, cataract, glaucoma, refractive errors, low vision, and blindness. Women have a higher prevalence of dry eye—often related to the greater incidence of autoimmune diseases, depression, and chronic pain—and use more treatments and therapies than men. Dry eye also affects their quality of life in ways different than men. She concluded by reminding attendees that their eyes are constantly making tears and that, “You only know that you are making tears all the time when your eyes are not making tears.”

TFOS Executive Director Amy Gallant Sullivan discusses the TFOS DEWS II™ Report’s impending publication in The Ocular Surface journal.

Moderator Dr. Karpecki called on attendee Andrew Morgenstern, OD, FAAO (consultant to the joint Department of Defense/Department of Veterans Affairs Vision Center of Excellence) to respond to a question about the impact of dry eye on veterans. The VA reports that upwards of 70 percent of Traumatic Brain Injury (TBI)-exposed veterans have dry eye symptoms.

TFOS Founder David A. Sullivan, MS, PhD, FARVO (Senior Scientist, Scheepens Eye Research Institute, and Associate Professor, Department of Ophthalmology, Harvard Medical School) addressed the pathophysiological mechanism of dry eye and how it may be induced unintentionally through medical treatment by a physician—called iatrogenic Dry Eye—resulting from drug therapies, ophthalmic surgeries, and several other causes. He also addressed quality of life issues, noting that the impact of moderate-to-severe dry eye is comparable to dialysis and sever angina. He concluded by presenting the updated TFOS DEWS II™ Report definition of dry eye: “Dry eye is a multifactorial disease of the ocular surface characterized by a loss of homeostasis of the tear film, and accompanied by ocular symptoms, in which tear film instability and hyperosmolarity, ocular surface inflammation and damage, and neurosensory abnormalities play etiological roles.”

The Briefing faculty consisted of Paul Karpecki, OD, FAAO (Kentucky Eye Institute), Susan Vitale, PhD, MHS (National Eye Institute), Janine Austin-Clayton, MD (National Institutes of Health), and David A. Sullivan, MS, PhD, FARVO (Scheepens Eye Research Institute/Harvard Medical School and Founder, Tear Film & Ocular Surface Society, TFOS).