On March 11, AEVR held its World Glaucoma Week 2015 Congressional Briefing, co-hosted by all major glaucoma societies and research organizations (see box below). Entitled Preventing Blindness and Controlling Intraocular Pressure (IOP) in At-Risk Populations, the event focused on glaucoma's public health challenges. Featured speaker Steven Mansberger, M.D., M.P.H., who serves as the Vice Chair and Director of Glaucoma Service at the Legacy Devers Eye Institute and holds an appointment at Oregon Health and Science University as Affiliate Professor of Ophthalmology and Adjunct Professor in Public Health and Preventive Medicine, spoke about his NEI and the Centers for Disease Control and Prevention (CDC)-funded research into how IOP is measured and controlled, with an emphasis on drug regimen adherence across ethnic populations.

He described Legacy Devers' extensive glaucoma screening and detection research, which has resulted in a formula that determines if an individual will develop glaucoma in the next five years with or without medication. Although noting the usefulness of screening for elevated IOP, he also emphasized the importance of examining the optic nerve disc, since damage to it can still result even if an individual has normal tension IOP. He cited the example of Northwest Native Americans, who have a lower IOP than other ethnic groups yet are susceptible to glaucoma, likely due to optic nerve sensitivity. They have less mixing of their gene pool with Europeans than other Native Americans, and display the same low IOP glaucoma as seen in the Japanese.

Since the average glaucoma patient is treated for 14 years, a patient's compliance with their IOP-reducing drug regimen is important in disease management, especially since NEI's Ocular Hypertension Treatment Study (OHTS) found that pressure-reducing eye drops delayed disease onset. Dr. Mansberger reported that 20-80 percent of glaucoma patients have poor adherence, which includes not using the medication at designated times and using too much or too little—as in missing the eye. Risk factors for poor adherence include older age and systemic conditions (e.g. dementia), using multiple medications, lower educational level, and inadequate social support.

He described Legacy Devers’ research to predict compliance and develop models to improve patient adherence.

Although noting the usefulness of screening for elevated IOP, he also emphasized the importance of examining the optic nerve disc, since damage to it can still result even if an individual has normal intraocular pressure. —Dr. Mansberger

He concluded by describing various current and future treatments to lower IOP, which include laser treatment and incisional surgery—such as a trabeculectomy—as well as minimally invasive surgeries. The latter includes development of a sustainable release medication injected into the eye which could treat it for the equivalent of three-to-six months of a daily drug regimen.

The first World Glaucoma Day was held on March 6, 2008, and the U.S. House of Representatives passed H.R. 981, which recognized the event and supported NEI's efforts to research the causes of and treatments for glaucoma. Since 2010, the day has expanded into a week of events held worldwide, with all major glaucoma professional societies and research organizations co-sponsoring AEVR’s 2015 event, including:

- Research to Prevent Blindness
- American Glaucoma Society
- Association for Research in Vision and Ophthalmology
- Glaucoma Research Foundation
- Optometric Glaucoma Society
- The Glaucoma Foundation

On March 19, Alliances member Usher Syndrome Coalition held a Congressional Briefing accompanying office visits to educate about this most common cause of combined deafness and blindness, which is a rare inherited genetic disorder that affects 50,000 Americans and 400,000 people worldwide. The Briefing featured Edwin Stone, M.D., Ph.D. (Stephen A. Wynn Institute for Vision Research, University of Iowa), who described Usher's, current research into the genetic basis of the disease, and the potential for a treatment, such as gene therapy.

NIH was represented by NEI and the National Institute on Deafness and Other Communications Disorders (NIDCD). NIH, which has added Usher Syndrome to its Research Condition and Disease Categorization (RDCC) registry, spent $19 million on research Institute-wide last year. The Coalition is developing a roadmap that it hopes will assist NIH in investing those resources in the most promising research.