

December 1<sup>st</sup>, 2023

**RE: New Rigid Contact Lenses for First Responders**

Dear Hiring Agency:

As a 501(c)(3) nonprofit organization, the Scleral Lens Education Society aims to educate eye care professionals and the public on the benefits, uses and applications of scleral lenses. It is our goal to share with you how this contemporary contact lens technology can expand your agency's pool of prospective employees, by meeting or exceeding existing occupational vision requirements.

Specific vision requirements to meet the eligibility for employment are variable among different first responder disciplines. To meet these standards, it is generally accepted that contact lenses can be used as a method of vision correction. However, some agencies have a blanket legacy policy prohibiting the use of *any* hard or rigid contact lenses due to their potential for dislodgement from the eye. We seek to clarify the types of rigid contact lenses and refute the exclusion of scleral contact lens wear based on the potential for dislodgement.

Rigid gas permeable (GP) contact lenses can be classified based on their overall diameter.

**Corneal GP lenses** rest on the corneal surface and typically have a diameter of 12.0 mm or smaller. Although they align to the corneal curvature, they do not create a seal to the corneal surface, and they may interact with the eyelids. As a result, corneal GP lens could eject or dislodge from the eye with rapid eye movements or during high-intensity activity or physical contact.

**Scleral GP lenses** are larger diameter GP lenses that range between 14.0 and 22.0 mm in diameter. They vault over the corneal surface and align and rest over the sclera (white of the eye) and bulbar conjunctiva. The semi-seal created by this alignment effectively eliminates lens movement and eyelid interaction that would contribute to lens dislodgement.

When appropriately prescribed, scleral lenses are a suitable vision option for first responders. In addition to their on-eye stability, scleral lenses can provide superior optics to soft contact lenses as well as a high level of comfort.<sup>1,2</sup> Therefore, our position maintains there is no greater risk of dislodgement with a scleral GP lens than a soft contact lens. This position has shared support from the Gas Permeable Lens Institute (GPLI), the leading industry organization dedicated to providing GP contact lens education and resources, and BostonSight, a nonprofit healthcare organization treating patients with scleral lens technology for over 30 years. Provided all other vision requirements are met, we believe candidates wearing scleral lenses should not be immediately excluded from eligibility.

Thank you for considering updating your agency's occupational vision requirements to include scleral contact lenses. If additional information can be provided, please don't hesitate to reach out.

Respectfully,

President  
The Scleral Lens Education Society



Executive Director  
Gas Permeable Lens Institute



President & CEO  
BostonSight



References

1. Michaud L, Barriault C, Dionne A, Karwatsky P. Empirical fitting of soft or rigid gas-permeable contact lenses for the correction of moderate to severe refractive astigmatism: a comparative study. *Optometry*. 2009;80:375-83.
2. Michaud L, Bennett ES, Woo SL, et al. Clinical evaluation of large diameter rigid-gas permeable versus soft toric contact lenses for the correction of refractive astigmatism. A multicenter study. *Eye Contact Lens*. 2016; Nov 24.