

**On behalf of Vision Expo, we sincerely
thank you for being with us this year.**

Vision Expo Has Gone Green!

We have eliminated all paper session evaluation forms. Please be sure to complete your electronic session evaluations online when you login to request your CE Letter for each course you attended! Your feedback is important to us as our Conference Advisory Board considers content and speakers for future meetings to provide you with the best education possible.



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Financial Disclosure

Scott Keating has no financial interests to disclose.

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**Make Life Easier
with Tints**

Dr. Scott Keating, O.D.

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Course Description

- ▶ Successful sales strategies are the key to a healthy, vibrant small business. In this course, attendees will learn how to sell specific tint colors to enhance the quality of life, whether by helping with leisure activities or by helping relieve symptoms from specific medical conditions. Additionally understand how UV and high energy blue light effect the ocular tissue.

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Upon completion of this course, the attendee should be able to:

01

Learn how to sell and explain why certain tints improve quality of leisure activities.

02

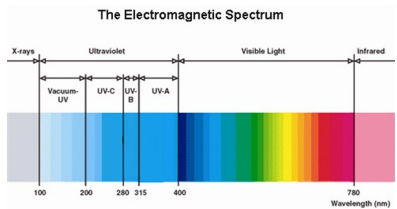
Learn which tints help relieve symptoms related to medical conditions.

03

Learn better understanding of ocular tissue damage from UV and blue light wavelengths.

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Ultraviolet Radiation and your eyes



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Ultraviolet Radiation and your eyes

UVC (100-280nm) these are energy UV rays. Fortunately, the atmosphere's ozone layer blocks virtually all UVC rays.

UVB (280-315nm) These rays are partially filtered by the ozone layer, UVB increases risk of skin cancer and sunburn.

UVB Rays also increase skin Discolorations, wrinkles, and premature aging of the skin. UVB is absorbed by the cornea. UVB can cause photo keratitis "snow blindness" - painful inflammation of the cornea.

UVA (315-380nm) UVA rays pass through the cornea and reaches the lens and retina, increasing risk for cataracts and macular degeneration.

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Key Fact:

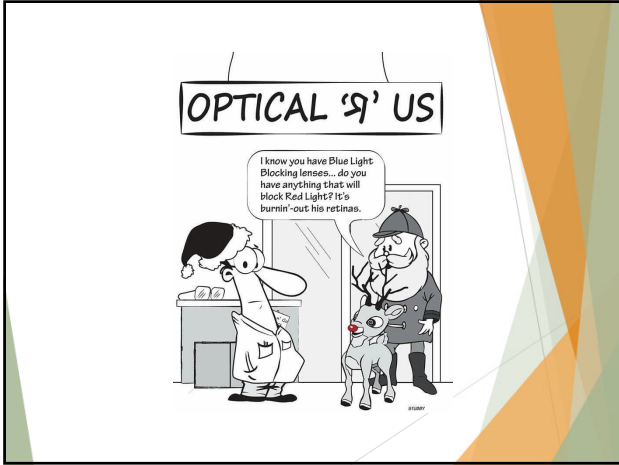
- ▶ As much as 80% of our lifetime exposure to UV rays occurs by age 18.

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High Energy Visible (HEV) Radiation

- ▶ HEV (380-500nm) rays, penetrate deeply into the eye and can cause retinal damage.
- ▶ Sources include:
 - ▶ Sun
 - ▶ CFL bulbs 26% blue light
 - ▶ LEDS 35% blue light (traditional Incandescent bulbs emit only 3% blue light)
 - ▶ 415-435NM is the most damaging band
 - ▶ Medications: sulfas tetracycline, sulfa drugs, birth control pills, and diuretics (heart and HTN meds) can increase your body's sensitivity to UV and HEV radiation

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Key Fact:

- ▶ Cloud cover doesn't affect UV levels significantly. This is because UV is invisible radiation, not visible light, and can penetrate clouds.
- ▶ Use UV and HEV blocking tints/coatings

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Tint Color recommendations for leisure activities

- ▶ Golf - Recommendation: Brown Tint
 - ▶ Brown tint - blocks out blue light waves which enhances contrast in green colors (rough vs fairway etc.) thereby improving visual acuity on the golf course, Brown also improves depth perception which allows the golfer to judge distances better.
 - ▶ Purple Tint - second best based on the science that a purple tint makes the ball "pop" against the grass or sky, and can read the contour of the green better. (so good for golfers who lose their ball easily)



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Tint Color recommendations for leisure activities

- ▶ Fishing - Polarized lenses are a must.
 - ▶ How the polarization works - flat surfaces (water) reflect light horizontally instead of the usual way in all direction. Horizontal light is very visually distracting - hence glare.
 - ▶ Polarized lenses filter out (block) all horizontal light rays and therefore only vertical light rays pass through to the eye. As a result, horizontally blinding glare does not enter the eye.
 - ▶ Brown Lenses - block out blue distracting light rays which allows more green to show through (aquatic plants) therefore you can see grads beds etc., much better.
 - ▶ Gray Lenses - Works best in deep waters such as ocean fishing.



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Tint Color recommendations for leisure activities

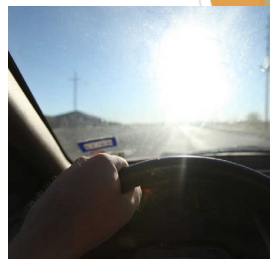
- ▶ Tennis
 - ▶ Blue lenses - blue or teal lenses mute all light colors except optic yellow - so tennis ball pops out of the background.
 - ▶ Brown Lenses - second choice but not dark brown - help enhance depth



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Tint Color recommendations for leisure activities

- ▶ Driving
 - ▶ Polarized lenses - are best to block glare off of windshield and hood of car. Many colors work well, brown, gray, green.
 - ▶ Grey lenses - give neutral color spectrum.
 - ▶ Brown lenses - help in early morning light (more blue rays in the morning) and brown blocks blue light
 - ▶ Green lenses - a nice comfort tint to the eyes
 - ▶ Off Road Driving - yellow or brown tint for better depth and contrast to judge terrain.



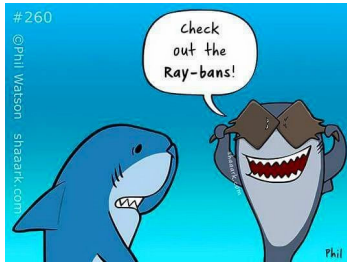
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Tint Color recommendations for leisure activities

- ▶ Trap Shooting - if you have to pick one tint for all purpose: Bronze/Amber/Brown-ish color best for judging depth
 - ▶ Vermillion/Cherry tints - are good for target enhancing choices also good for orange targets with trees in the background.
 - ▶ Only need medium tint - not dark tint lenses. Dark lenses decrease visibility.
 - ▶ Rose Tints - good for indoor shooting
 - ▶ Yellow tint - increases in depth perception



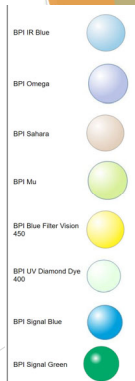
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Tint Colors to help relieve medical symptoms

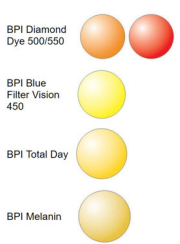
- ▶ Autism
 - ▶ Blue, Sahara (light tan), Green, Yellow
 - ▶ Helps with sensory overload
 - ▶ Calming effect
 - ▶ Orange, Yellow, Red
 - ▶ Helps with anger
 - ▶ Calms mood



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Tint Colors to help relieve medical symptoms

- ▶ ARMD
 - ▶ Orange, Red, Yellow
 - ▶ Increases contrast and depth perception



BPI Diamond Dye 500/550

BPI Blue Filter Vision 450

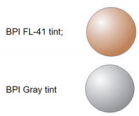
BPI Total Day

BPI Melanin

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Tint Colors to help relieve medical symptoms

- ▶ Blepharospasm
 - ▶ Rose brown
 - ▶ Blocks Blue/Green wavelength



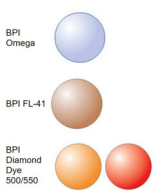
BPI FL-41 tint:

BPI Gray tint

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Tint Colors to help relieve medical symptoms

- ▶ Brain Trauma
 - ▶ Violet, Orange, Red
 - ▶ Patient with brain trauma are more photosensitive, especially to fluorescent bulbs that flicker
 - ▶ Needed to reduce visual stress



BPI Omega

BPI FL-41

BPI Diamond Dye 500/550

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Tint Colors to help relieve medical symptoms


- ▶ Cataract
 - ▶ Yellow/Brown
 - ▶ Not dark shades

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Tint Colors to help relieve medical symptoms

- ▶ Dyskinesia
 - ▶ Light blue, deep blue, gray
- ▶ Parkinson's
 - ▶ Deep Blue


BPI IR Blue



BPI Deep Blue Zee



BPI Gray




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Tint Colors to help relieve medical symptoms

- ▶ Dyslexia
 - ▶ Light Blue, Aqua


BPI IR Blue



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Tint Colors to help relieve medical symptoms

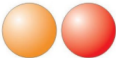
- ▶ Epilepsy
 - ▶ Blue

BPI Deep Blue Zee 

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Tint Colors to help relieve medical symptoms



- ▶ Retinitis Pigmentosa
 - ▶ Orange/Red

BPI Diamond Dye 500/550 (Tint to cut-off of 527 nm) 

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Tint Colors to help relieve medical symptoms

- ▶ Amblyopia
 - ▶ Light Blue / Deep Blue

BPI IR Blue 
BPI Deep Blue Zee 

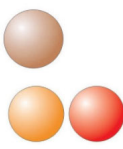
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Tint Colors to help relieve medical symptoms

- ▶ Light Induced Migraine
 - ▶ Rose, Orange, Red

BPI FL-41

BPI Diamond Dye 500/550



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Exercise

- ▶ Start recommending the proper tints to match medical conditions and leisure activities
- ▶ Educate the patient/customer on the risk of damaging UV and HEV rays

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Question & Answer

Dr. Scott Keating O.D.

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