

Laser Safety

UV and IR radiation are most strongly absorbed by which of the following ocular tissues?

- a. Cornea and lens
- b. Iris and pupil
- c. Retina and choroids
- d. Aqueous and vitreous

Visible light is most strongly absorbed by which of the following ocular tissues?

- a. Cornea and lens
- b. Iris and pupil
- c. Retina and choroids
- d. Aqueous and vitreous

Which ANSI laser class is the safest and which is the most dangerous?

- I
- II
- IIIa
- IIIb
- IV

What is the maximum laser power output that is safe for eye exposure within the quarter-second interval of the blink reflex?

- a. $<1\mu\text{mW}$
- b. $<1\text{ mW}$
- c. $<5\text{mW}$
- d. $<1\text{W}$

What should you do if you need to compute safe exposure limits?

- 1. Wavelength of laser
- 2. Reference – my notes

What is the most complete reference on laser safety?

Sliney

What would laser safety glasses designed for a helium-neon laser (633 nm) probably look like?

- a. Completely black to let no light through.
- b. Neutral gray to transmit all wavelengths equally
- c. Red tinted lenses
- d. Blue tinted lenses

UV Protection

UV radiation can damage which of the following ocular tissues?

- a. Cornea and sclera
- b. Lens
- c. Retina
- d. All of the above

What warnings should you give a patient for whom you prescribe doxycycline?

What advice should you give a patient so he can protect himself from UV?

- a. Avoid being outdoors during the middle of the day if possible.
- b. Wear wrap-around sunglasses.
- c. Wear a hat.

A patient asks you what kind of sunglasses you would recommend. What should you say?

- a. Neutral gray.
- b. Blocks 100% of UV.
- c. About 15% transmission.

Protection

Which ANSI standard specifies eye protection in the workplace?

- a. Z80
- b. Z87
- c. Z136
- d. Z200

How can you tell whether or not safety frames and lenses meet the Z87 standards?

Z87 on the frames, lab logo on the lenses.

How can you advise a patient on what type of eye protection he/she needs for a particular job?

Which ophthalmic material provides the best impact resistance?

Polycarb or Trivex

Which of the following environments has the greatest number of eye injuries?

- a. Industry
- b. Sports
- c. Home
- d. Driving
- e. Other

Name several categories of patients who should be prescribed polycarb lenses?

Children
Athletes
Monocular patients
Amblyopes

Sports

What categories of work should a sports vision optometrist be involved in?

- a. Vision correction
- b. Contact lenses
- c. Recommending proper eye protection
- d. Testing for specific visual skills
- e. Training specific visual skills

Name a handy, comprehensive reference you can turn to get started in developing a sports vision practice.

AOA Sports Vision Guidebooks

Driving

What are the visual requirements to get a ordinary (non-commercial) driver's license in OK?

20/50

70° field of view

What are the visual requirements for a commercial driver's license?

20/40

70° field of view

Can identify colored traffic lights

Can a person in OK get a license with worse than 20/50 vision?

Can a person in OK get a license with low vision telescopes?