Laser Pointer Safety Tips

Commercial laser pointers are most commonly designed to assist speakers when giving lectures or business presentations. They are also used in the university classroom to demonstrate optical properties and in construction trades for precise alignment. A recent safety bulletin by the Laser Institute of America (http://www.lia.org/subscriptions/safety_bulletin/laser_pointer/) discusses the use and misuse of pointers and reviews a number of reported incidents.

Laser pointers are not toys and permanent eye injuries are possible with misuse. In a recent article a researcher at the National Institute of Standards and Technology tested 122 laser pointers and found that nearly 90% of green pointers and 44% of red pointers were out of compliance with federal safety regulations. These federal regulations are intended to keep output powers at a safe level for accidental viewing. An increase in output power increases the potential for eye injury.

The following safety tips should be followed:

- Never shine a laser pointer at anyone. Laser pointers are designed to illustrate inanimate objects.
- Do not allow minors to use a pointer unsupervised.
  Laser pointers are not toys.
- Do not point a laser pointer at mirror-like surfaces. A reflected beam can act like a direct beam on the eye.
- Be aware of irresponsible uses of pointers so the psychological effect will be minimized if you are illuminated by one.
- Do not purchase a laser pointer if it does not have a caution or danger sticker on it identifying its class. Report suspicious devices to the FDA.

Please contact EHRS with any questions or comments at 215-898-4453 or email ehrs@ehrs.upenn.edu