

Cornell University

Environment, Health and Safety Radiation Safety 395 Pine Tree Road, Suite 210 Ithaca, New York 14850 607-255-3314

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To: The Cornell Community

From: Environment, Health and Safety

Re: Laser safety

The laser safety community has recently developed concerns about the availability of affordable handheld laser pointers so dangerously high-powered that even instantaneous exposure to the direct beam could result in permanent, catastrophic eye injury. These products are available through third-party sellers on seemingly reputable marketplaces such as Amazon.com and are being marketed with innocuous descriptions like camping supplies, pet toys, and tactical flashlights:



Many of these products are manufactured overseas and do not conform with federal regulations intended to protect the public from dangerous sources of laser radiation. If you are interested, see <u>this</u> <u>YouTube video</u> demonstrating several dangerous laser products obtained from Amazon. Laser safety professionals are attempting to raise awareness of the problem with U.S. Regulatory Agencies, and with the public in general.

Lasers are classified according to their potential to cause injury and must be labeled by the manufacturer. Lasers labeled as Class 2 (or II) are considered safe, as long as you do not intentionally stare directly into the beam for an extended period of time. Class 3R (or IIIa) lasers are powerful enough to cause an injury and must be handled responsibly. (Class 3R or higher handheld laser pointers are not permitted in Europe, nor at national labs managed by the U.S. Department of Energy.)

Any Class 3 (or III), Class 3B (or IIIb), Class 4 (or IV), or unclassified laser must be reviewed and approved by Cornell's Laser Safety Officer before it can be used. These lasers require written safety procedures, laser safety eyewear, and special infrastructure like safety curtains and interlock systems. Please contact <u>askEHS@cornell.edu</u> if you possess such a laser that has not already been reviewed and approved, or if you are planning to procure a new laser.

Please see <u>https://ehs.cornell.edu/research-safety/radiation-safety/laser-safety</u> if you would like to learn more about Cornell's laser safety program.