

Revision of ANSI Standard Z136.3 Published

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A new edition of the American National Standard for Safe Use of Lasers in Health Care, ANSI Z136.3 was printed and issued in early 2012. The new edition replaced ANSI Z136.3-2005, American National Standard for Safe Use of Lasers in Health Care Facilities (which had replaced the earlier edition of 1996). Note that there is change in title, since “facilities” has been dropped. While this may appear trivial, the reasoning was that an emphasis should be on health care applications facilities. This standard was expanded formally to include not only medical and dental facilities but spas and veterinary facilities as well. There have been a number of minor editorial changes as would be expected in any new edition.

Several definitions have been altered and new terms introduced; for example, “standard operating procedures (SOP’s)” are now referred to as “policies and procedures (P/P’s).” There has been clarification of different levels of control based upon whether laser use was in an “unrestricted location,” a “restricted location,” or a “controlled location.” There are several important, substantive changes as well. The several appendices which are informative and not part of the basic standard and relate to specialties have been updated. A few new wavelengths have been added that were not included in previous versions. The section relating to the need or lack of need to wear laser eye protectors during endoscopic procedures or when fibers are armored and fixed as part of a delivery system was re-written and conditions were clarified. Laser Safety Committees are no longer just a suggestion, but are mandatory for “diverse use facilities” such as large medical centers. There are new requirements to pay attention to electrical safety. The LSO role has been enlarged with regard to laser rental services, lasers for home use are addressed, and the informative annex on laser dentistry was significantly enlarged. The appendix on safe use of lasers at exhibitions was deleted. Some sample forms in appendices were updated. The term “management” has been added in a number of places.

Although most readers may note relatively few significant changes, one change that has been rather controversial within the standards subcommittee (SSC-3) on health care lasers (the drafting committee for ANSI Z136.3) has been the formal introduction of two new positions with defined responsibilities, a Deputy Laser Safety Officer—the DLSO (previously recognized implicitly for large institutions, but

never called out specifically) and a completely new position—initially termed a “Laser Site Supervisor,” with a list of duties to “manage” the laser operation and report to the LSO. After much spirited discussion and complaints of gross over-administration, this position was later re-named the “laser site safety contact (LSSC)” but few of the duties were eliminated. The LSSC is responsible for “overseeing laser activities in an identified use area,” “working as a liaison between clinical staff and the LSO...” The LSSC is even called on in this revision to “troubleshoot equipment” and “maintain inventory” as well as several other duties. This led to critical comments from some committee members and terms like the “laser safety busybody.” Although ASLMS and most, if not all physician members, on the voting committee voted “No” on this revision of the standard—primarily as a result of this new position, the majority vote—primarily from practicing Laser Safety Officers (LSOs)—was in favor of this change. There was indeed a difference of opinion among some ASLMS members who serve as LSO’s and other interested members who attended safety meetings at the ASLMS during the past several years, but the Board of Directors voted to oppose this new administrative burden. It should be noted that the recommendation for LSSC’s is for large institutions and is a “should” rather than “shall” statement, which means that it is not mandatory for full compliance and is only advisory. The vote was considered “a consensus” under the ANSI accredited Z136 Committee.

With regard to the role of the LSO, the pendulum has swung considerably with regard to the LSO role and laser safety administrative requirements over the past decade. The role of the LSO has been strengthened in the new edition. A decade ago, the then Chair of the ANSI subcommittee for health care lasers, Prof. Stephen Trokel, M.D., argued for the complete elimination of the LSO as an unnecessary role in surgical facilities. He argued that the responsibility for safe operation starts with the manufacturer and passes to the surgeon user. What physicians were complaining about is the transference of their OR responsibility for safety to another person. He noted that surgeons are used to dealing with dangerous tools and material. Knives are sharp, drills and saws can (and have) injured members of the surgical team, and electro-diathermy can cause burns where they are unwanted. His view remains a minority on the Committee, nevertheless, a new sentence appears in the introduction of the standard: “In this standard, the principle hazard control rests with the laser user whose responsibility is to know and follow the guidelines stated in this standard.” The laser user in the OR is the surgeon.