



## Safe use of lasers in health care



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# Preface

This is the fifth edition of CSA Z386, *Safe use of lasers in health care*. It supersedes the previous editions, published in 2014, 2008 under the title *Safe use of lasers in health care facilities*, and in 2001 and 1992 under the title *Laser Safety in Health Care Facilities*.

This Standard was prepared by the Subcommittee on Laser Safety in Health Care, under the jurisdiction of the Technical Committee on Perioperative Safety and the Strategic Steering Committee on Health and Well-being, and has been formally approved by the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

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  - c) *wording of the proposed change; and*
  - d) *rationale for the change.*

# CSA Z386:20

## Safe use of lasers in health care

### 0 Introduction

#### 0.1 General

Health care lasers present unique hazards and risks not associated with other types of medical or surgical equipment. This Standard provides laser team members with the engineering, administrative, procedural, and control measures, as well as guidance on the selection and use of PPE, which is necessary for ensuring a safe operating environment and positive patient outcomes.

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### 1 Scope

#### 1.1

This Standard provides guidance for the safe use of lasers in health care. It applies to all procedures in health care settings where health care lasers are used, including, but not limited to, the following:

- a) health care facilities;
- b) dental clinics, offices, and facilities;
- c) veterinary facilities;
- d) laboratories and other research facilities;
- e) physician offices;
- f) cosmetic and aesthetic treatment facilities;
- g) medical teaching facilities;
- h) medical professional exhibitions and trade shows; and
- i) medical laser servicing organizations.

#### 1.2

This Standard presents the engineering, procedural, personal protective equipment, and administrative controls necessary to ensure the safety of persons at risk in the vicinity of a health care laser, based upon a risk assessment.

**Note:** *A risk assessment is a thorough analysis of the workplace to identify situations, processes, etc. that can cause harm. A risk assessment, performed before policies and procedures are developed, is useful for determining engineering, administrative, and procedural controls and work practices to reduce the risk of laser exposure through*

- a) identification of hazards;
- b) analysis or evaluation of the risks associated with those hazards; and
- c) determining appropriate ways to eliminate or control the hazards.