



Electrical safety and essential electrical systems in health care facilities



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Preface

This is the fourth edition of CSA Z32, *Electrical safety and essential electrical systems in health care facilities*. It supersedes the previous editions, published in 2009, 2004 and 1999, and is harmonized with CSA C22.1, *Canadian Electrical Code, Part I*, and CSA C282, *Emergency electrical power supply for buildings*.

This edition features important revisions to many Clauses. An informative Annex has been added on uninterruptible power systems (UPS) describing factors that should be considered by health care facilities for use of UPS. Some definitions and terminology have been updated to better correspond with the third edition of CAN/CSA C22.2 No. 60601-1 and to the *Canadian Electrical Code, Part I*. Reference has been added to CSA SPE-3000, *Model code for the field evaluation of medical electrical equipment and systems*.

Clarification of requirements have been made for patient-owned electrical devices, use of power bars, luminaries in patient care environments, insulation resistance, solidly grounded systems, isolated ground receptacles, battery-operated emergency lighting, and supply or consumer services. Information on isolated power systems and line isolation monitors is more directly referenced in this Standard. A guidance table on approximate spacing for interference-free working with unfiltered equipment, in the 2009 edition, has been removed.

Updates to informative notes and minimum number of receptacles and branch circuits in basic and intermediate care areas have been made. An informative annex has been added on the interaction of the *Canadian Electrical Code* with related ISO and IEC standards.

CSA Group acknowledges that the development of this Standard was made possible, in part, by the financial support of the governments of Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Québec, Saskatchewan, and Yukon, as administered by the Canadian Agency for Drugs and Technologies in Health (CADTH).

This Standard was prepared by the Subcommittee on Essential Electrical Systems, under the jurisdiction of the Technical Committee on Application of Electricity in Health Care and the Strategic Steering Committee on Health Care Technology, and has been formally approved by the Technical Committee.

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