



**CSA  
Group**

**Z317.14-17**

# **Wayfinding for health care facilities**



# Legal Notice for Standards

Canadian Standards Association (operating as “CSA Group”) develops standards through a consensus standards development process approved by the Standards Council of Canada. This process brings together volunteers representing varied viewpoints and interests to achieve consensus and develop a standard. Although CSA Group administers the process and establishes rules to promote fairness in achieving consensus, it does not independently test, evaluate, or verify the content of standards.

## Disclaimer and exclusion of liability

This document is provided without any representations, warranties, or conditions of any kind, express or implied, including, without limitation, implied warranties or conditions concerning this document’s fitness for a particular purpose or use, its merchantability, or its non-infringement of any third party’s intellectual property rights. CSA Group does not warrant the accuracy, completeness, or currency of any of the information published in this document. CSA Group makes no representations or warranties regarding this document’s compliance with any applicable statute, rule, or regulation.

IN NO EVENT SHALL CSA GROUP, ITS VOLUNTEERS, MEMBERS, SUBSIDIARIES, OR AFFILIATED COMPANIES, OR THEIR EMPLOYEES, DIRECTORS, OR OFFICERS, BE LIABLE FOR ANY DIRECT, INDIRECT, OR INCIDENTAL DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES, HOWSOEVER CAUSED, INCLUDING BUT NOT LIMITED TO SPECIAL OR CONSEQUENTIAL DAMAGES, LOST REVENUE, BUSINESS INTERRUPTION, LOST OR DAMAGED DATA, OR ANY OTHER COMMERCIAL OR ECONOMIC LOSS, WHETHER BASED IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR ANY OTHER THEORY OF LIABILITY, ARISING OUT OF OR RESULTING FROM ACCESS TO OR POSSESSION OR USE OF THIS DOCUMENT, EVEN IF CSA GROUP HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES.

In publishing and making this document available, CSA Group is not undertaking to render professional or other services for or on behalf of any person or entity or to perform any duty owed by any person or entity to another person or entity. The information in this document is directed to those who have the appropriate degree of experience to use and apply its contents, and CSA Group accepts no responsibility whatsoever arising in any way from any and all use of or reliance on the information contained in this document.

CSA Group is a private not-for-profit company that publishes voluntary standards and related documents. CSA Group has no power, nor does it undertake, to enforce compliance with the contents of the standards or other documents it publishes.

## Intellectual property rights and ownership

As between CSA Group and the users of this document (whether it be in printed or electronic form), CSA Group is the owner, or the authorized licensee, of all works contained herein that are protected by copyright, all trade-marks (except as otherwise noted to the contrary), and all inventions and trade secrets that may be contained in this document, whether or not such inventions and trade secrets are protected by patents and applications for patents. Without limitation, the unauthorized use, modification, copying, or disclosure of this document may violate laws that protect CSA Group’s and/or others’ intellectual property and may give rise to a right in CSA Group and/or others to seek legal redress for such use, modification, copying, or disclosure. To the extent permitted by licence or by law, CSA Group reserves all intellectual property rights in this document.

## Patent rights

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights. CSA Group shall not be held responsible for identifying any or all such patent rights. Users of this standard are expressly advised that determination of the validity of any such patent rights is entirely their own responsibility.

## Authorized use of this document

This document is being provided by CSA Group for informational and non-commercial use only. The user of this document is authorized to do only the following:

If this document is in electronic form:

- load this document onto a computer for the sole purpose of reviewing it;
- search and browse this document; and
- print this document if it is in PDF format.

Limited copies of this document in print or paper form may be distributed only to persons who are authorized by CSA Group to have such copies, and only if this Legal Notice appears on each such copy.

In addition, users may not and may not permit others to

- alter this document in any way or remove this Legal Notice from the attached standard;
- sell this document without authorization from CSA Group; or
- make an electronic copy of this document.

If you do not agree with any of the terms and conditions contained in this Legal Notice, you may not load or use this document or make any copies of the contents hereof, and if you do make such copies, you are required to destroy them immediately. Use of this document constitutes your acceptance of the terms and conditions of this Legal Notice.



# ***Standards Update Service***

***Z317.14-17***

***May 2017***

**Title:** *Wayfinding for health care facilities*

To register for e-mail notification about any updates to this publication

- go to [shop.csa.ca](http://shop.csa.ca)
- click on **CSA Update Service**

The **List ID** that you will need to register for updates to this publication is **2425318**.

If you require assistance, please e-mail [techsupport@csagroup.org](mailto:techsupport@csagroup.org) or call 416-747-2233.

Visit CSA Group's policy on privacy at [www.csagroup.org/legal](http://www.csagroup.org/legal) to find out how we protect your personal information.

*Z317.14-17*  
***Wayfinding for health care facilities***



*®A trademark of the Canadian Standards Association, operating as "CSA Group"*

*Published in May 2017 by CSA Group  
A not-for-profit private sector organization  
178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3*

*To purchase standards and related publications, visit our Online Store at [shop.csa.ca](http://shop.csa.ca)  
or call toll-free 1-800-463-6727 or 416-747-4044.*

*ISBN 978-1-4883-0834-5*

*© 2017 CSA Group  
All rights reserved. No part of this publication may be reproduced in any form whatsoever  
without the prior permission of the publisher.*

# Contents

Technical Committee on Health Care Facilities	3
Subcommittee on Wayfinding in Health Care Facilities	6
Preface	8
<b>0 Introduction</b>	<b>9</b>
<b>1 Scope</b>	<b>10</b>
<b>2 Reference publications</b>	<b>11</b>
<b>3 Definitions</b>	<b>12</b>
<b>4 General</b>	<b>15</b>
4.1 Wayfinding principles	15
4.2 Wayfinding multidisciplinary team (MDT)	17
4.2.1 Multidisciplinary team	17
4.2.2 Personnel and their group responsibilities — General	17
4.3 Accessible design for the built environment	18
4.4 Multiculturalism	19
4.5 Sustainability	20
4.5.1 General	20
4.5.2 Flexibility	20
<b>5 Place (planning and design)</b>	<b>21</b>
5.1 Master plan	21
5.2 Site design	21
5.2.1 General	21
5.2.2 Circulation design	22
5.2.3 Destinations and priorities	23
5.2.4 Landscape design	23
5.3 Interior circulation/architectural design	24
5.3.1 General	24
5.3.2 Circulation and building fundamentals	25
5.3.3 Architectural and interior design fundamentals	26
5.3.4 Special considerations	27
5.4 Inpatient rehabilitation	27
5.5 Inpatient continuing care	27
5.5.1 General	27
5.5.2 Long-term care or continuing care	27
5.6 Renovations and expansion of existing facilities	27
5.7 Washrooms	28
<b>6 Elements</b>	<b>29</b>
6.1 Sign program	29
6.2 Destination prioritization	30

6.3	Terminology and symbols	30
6.4	Information design	31
6.5	Consistency	31
6.6	Readability and legibility	31
6.7	Wing and building allocation	31
6.8	Room numbering systems	32
6.9	Reverse signage	32
6.10	Fabrication	33
6.11	Flexibility and changeability	33
6.12	Security issues	33
6.13	Colours	33
6.14	Elevator buttons and controls	33
6.15	Floor or wall lines	33
6.16	Allowance for temporary messages	33
6.17	Directories and floor maps	34
6.18	Sign placement, location, and installation coordination	34
6.19	Evolving technology	35
6.19.1	General	35
6.19.2	Mobile technology	35
6.19.3	Social media	36
6.19.4	Website	36
6.20	Donor recognition	37
<b>7</b>	<b>People</b>	<b>38</b>
7.1	People orientation	38
7.2	Information desk	38
7.2.1	General	38
7.2.2	Navigators	39
7.3	Referral wayfinding	39
<b>8</b>	<b>Continual improvement</b>	<b>40</b>
8.1	General	40
8.2	Follow up	40
8.3	Feedback	40

---

Annex A (informative)	— Examples of good wayfinding	41
Annex B (informative)	— Design and development using symbols	51
Annex C (informative)	— Cognitive challenges	52
Annex D (informative)	— List of wayfinding references	53

# ***Technical Committee on Health Care Facilities***

<b>G.D. Burrill</b>	Teegor Consulting Inc, Fredericton, New Brunswick <i>Category: User Interest</i> <i>Representing Canadian Healthcare Engineering Society (CHES)</i>	<i>Chair</i>
<b>R. Snell</b>	Parkin Architects Limited, Toronto, Ontario <i>Category: General Interest</i>	<i>Vice-Chair</i>
<b>S. Bagworth</b>	Agnew Peckham and Associates, Toronto, Ontario <i>Category: General Interest</i>	
<b>R.J. Belanger</b>	R.J. Belanger and Associates Ltd, Wasaga Beach, Ontario <i>Category: User Interest</i>	
<b>S. Bogdan</b>	St. Joseph's Health Centre, Toronto, Ontario <i>Category: User Interest</i>	
<b>B. Darrell</b>	NS Department of Transportation and Infrastructure Renewal, Halifax, Nova Scotia <i>Category: Government and/or Regulatory Authority</i>	
<b>R. Dixon</b>	R&C Dixon Consulting Ltd, Vancouver, British Columbia <i>Category: General Interest</i>	
<b>C. Drolet</b>	Ministère de la Santé et des Services sociaux (MSSS), Québec, Québec <i>Category: Government and/or Regulatory Authority</i>	
<b>L. Ellinas</b>	R Tec Consulting Ltd, Toronto, Ontario <i>Category: User Interest</i>	

<b>M. Fontaine</b>	Fraser Health - Lower Mainland Facilities Management, Surrey, British Columbia <i>Category: User Interest</i>
<b>C. Harvey</b>	North York General Hospital, Toronto, Ontario <i>Category: User Interest</i>
<b>M. Keen</b>	St. Michael's Hospital, Toronto, Ontario <i>Category: General Interest</i> <i>Chair, Strategic Steering Committee on Health Care Technology and Systems</i>
<b>G. Kuzmenko</b>	G K Enterprise Services Inc, Brantford, Ontario <i>Category: User Interest</i>
<b>D. MacKay</b>	Ministry of Health & Long-Term Care, Toronto, Ontario <i>Category: Government and/or Regulatory Authority</i>
<b>L.M. Shea</b>	Manitoba Health, Winnipeg, Manitoba <i>Category: Government and/or Regulatory Authority</i>
<b>N. Stark</b>	H. H. Angus & Associates Ltd, Toronto, Ontario <i>Category: User Interest</i>
<b>K. Stockton</b>	The Ottawa Hospital, Ottawa, Ontario <i>Category: User Interest</i>
<b>M. Weimer</b>	Fraser, Providence, Provincial, Vancouver Coastal Health, New Westminster, British Columbia <i>Category: Government and/or Regulatory Authority</i> <i>Representing British Columbia Ministry of Health</i>
<b>S.M. Wilson</b>	Alberta Health Services, Edmonton, Alberta <i>Category: User Interest</i> <i>Representing Infection Prevention and Control Canada (IPAC)</i>

**J. Kraegel**

CSA Group,  
Toronto, Ontario

*Project Manager*

# ***Subcommittee on Wayfinding in Health Care Facilities***

<b>R. Dixon</b>	R&C Dixon Consulting Ltd, Vancouver, British Columbia	<i>Chair</i>
<b>J. Bentley</b>	Canadian Hearing Society, Toronto, Ontario	
<b>W. Brus</b>	Kasian Architecture Interior Design and Planning Ltd, Vancouver, British Columbia	
<b>J. Cullen</b>	Alberta Health Services, Calgary, Alberta	
<b>F. Flynn</b>	Vancouver, British Columbia	
<b>C. Gresser</b>	Ministry of Health & Long-Term Care, Toronto, Ontario	
<b>Y. Harroche</b>	Jewish General Hospital, Montréal, Québec	
<b>J. Jerome</b>	Ministry of Health & Long-Term Care, Toronto, Ontario	
<b>M.J. Lovering</b>	Vertechs Design Inc, Toronto, Ontario	
<b>L.A. MacDonald</b>	Toronto, Ontario	
<b>C. McBride</b>	Spinal Cord Injury Organization of BC, Vancouver, British Columbia	
<b>W. McCutcheon</b>	Entro Communications, Inc., Toronto, Ontario	
<b>M. Panas</b>	Alberta Health Services, Edmonton, Alberta	

<b>R. Snell</b>	Parkin Architects Limited, Toronto, Ontario	
<b>S. Vaidya</b>	Ministry of Health & Long-Term Care, Toronto, Ontario	
<b>M. Verrier</b>	University of Toronto, Toronto, Ontario	
<b>C. Wiegand</b>	Jibestream Inc, Toronto, Ontario	
<b>M. Workman</b>	Edmonton, Alberta	
<b>A. Holbeche</b>	CSA Group, Toronto, Ontario	<i>Project Manager</i>

# Preface

This is the first edition of CSA Z317.14, *Wayfinding for health care facilities*.

This Standard defines the essential elements in planning, implementing, and continually improving wayfinding systems.

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 Association for Drugs and Technology in Health (CADTH).

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

## Notes:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
- 3) *This Standard was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
- 4) *To submit a request for interpretation of this Standard, please send the following information to [inquiries@csagroup.org](mailto:inquiries@csagroup.org) and include “Request for interpretation” in the subject line:*
  - a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
  - b) *provide an explanation of circumstances surrounding the actual field condition; and*
  - c) *where possible, phrase the request in such a way that a specific “yes” or “no” answer will address the issue.*

*Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at [standardsactivities.csa.ca](http://standardsactivities.csa.ca).*
- 5) *This Standard is subject to review within five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to [inquiries@csagroup.org](mailto:inquiries@csagroup.org) and include “Proposal for change” in the subject line:*
  - a) *Standard designation (number);*
  - b) *relevant clause, table, and/or figure number;*
  - c) *wording of the proposed change; and*
  - d) *rationale for the change.*

# Z317.14-17

## *Wayfinding for health care facilities*

### **0 Introduction**

Health care facilities (HCFs) are considered one of the most complex and stressful environments navigated by the public. Effective wayfinding is a key method HCFs should use to enhance the experience for patients and visitors. Significant research has been conducted on the impact of user disorientation within HCFs. These studies confirm that user satisfaction rankings are directly attributed to the ability to find ones way easily.

The key to creating an excellent patient experience is focusing on the patient's entire journey. From their home, on route to the HCF, entry, reception, treatment or procedures, back to the entry, and finally back to their home. All parts of this journey are equally important, as is the time taken to complete the journey.

Health care design is driven by sustainability, new technologies, and user-friendly environments. However, many HCFs utilize out-of-date signage systems that have been in place for prolonged periods as their only means of wayfinding. Given the complicated and emerging medical terminologies, endless supply of abbreviations, difficult to understand signage, and mazelike traffic patterns, it is no wonder that patients and visitors get lost, frustrated and dissatisfied with their experiences in some HCFs.

It is important to understand what wayfinding is and is not. Wayfinding is not simply signs, rather it comprises the following four equally important components:

- a) Places – Site, architecture planning, and design of interior and exterior spaces;
- b) People – Human orientation and interaction;
- c) Elements – Design, signage, technology, and emerging approaches; and
- d) Continual improvement – Maintenance and follow up on changing environment.

These components interrelate, providing all of the information necessary for people to find their way efficiently from a point of origin to a point of destination, often within complex architectural environments. An important concept to understand is that when any one of these elements is missing, or does not function optimally, pressure is extended on the other components to provide the missing information. The four components, working in balance, inform and assist in order for people to find their way without stress or effort. Wayfinding may be said to be the orchestration of the design of the built environment integrated with clear and consistent information about pathways to traverse the HCF environment.

Wayfinding is a spatial problem solving process that individuals use to understand where they are in an environment or building, know where their desired location is, and to know how to get to their desired destination from their present location. Optimization of wayfinding in HCFs is paramount, often due to the urgency, nature, and complexities of the services delivered, making a well-designed wayfinding system important for both users and providers of care and services.

A wayfinding system consists of processes to assist with clearly defined orientation from the first point of contact (i.e., home to arrival to the site), to the entrance to the building and the ultimate destination within the facility, and the return journey. Effective wayfinding for HCFs implies that the design of the system is both universal and inclusive, reflecting the needs of all users, whether able-bodied or persons with disabilities.

Wayfinding design consists of a diverse selection of interior and exterior coordinated elements including floor and wall treatments, distinctive site furnishings, lighting, and signage designed to capture the specific needs of all users to help them find their way while minimizing stress and reinforcing and optimizing independence. Due to the nature of the delivery of services (custodial or highly specialized) within some types of facilities, such as rehabilitation or long-term care, wayfinding design elements may be enhanced or purpose-built to accommodate the functions required to deliver effective care.

An important consideration in developing a wayfinding plan is to remember that HCFs have staff, patients, and visitors who are disabled. Disabilities include such challenges as mental, physical, visual, auditory, cognitive, and/or challenges associated with other disease and aging processes. For example, a person in a wheelchair requires a specific height of a sign to be able to read it; a person with a visual impairment could require a colour luminance contrast or texture to assist with orientation; and a cognitively challenged individual might not understand words but can perceive and appreciate pictorial representations.

## **1 Scope**

### **1.1**

#### **1.1.1**

This Standard establishes requirements for the planning, design, implementation, maintenance, evaluation, and continual improvement of wayfinding systems for HCFs.

#### **1.1.2**

This Standard addresses the following components of wayfinding as a user experience, a process, a plan, and a system:

- a) place;
- b) people;
- c) elements; and
- d) continual improvement.

### **1.2**

This Standard sets out requirements for intuitive, accessible, and understandable wayfinding through the following:

- a) facility design as the starting point of a user friendly wayfinding system;
- b) natural orientation concept in wayfinding strategy;
- c) consistency in sign content, layout, and program organization;
- d) visual continuity and order in signage for all types of HCFs and sites;
- e) the number of decision-making points through HCFs and sites;
- f) clarity and consistency in all forms of communication to the patients, visitors, and providers;
- g) the number of signs on existing HCFs and sites;
- h) waylearning for return patients, visitors, and providers;
- i) accessible wayfinding elements;
- j) applicable multicultural and multilingual requirements;
- k) digital and emerging technologies; and
- l) a sustainable approach in implementation of wayfinding strategies.

### 1.3

This Standard does not include emergency and life safety aspects of egress as determined by the authority having jurisdiction.

### 1.4

This Standard applies to all classes of HCF.

### 1.5

In this Standard, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

### 1.6

The values given in SI units are the units of record for the purposes of this Standard. The values given in parentheses are for information and comparison only.

## 2 Reference publications

This Standard refers to the following publications, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto:

**Note:** See also Annex D for a list of wayfinding references.

#### **CSA Group**

B651-12

*Accessible design for the built environment*

EXP06-2015

*Evaluating emerging materials and technologies for infection prevention and control*

CAN/CSA-Z317.2-15

*Special requirements for heating, ventilation, and air-conditioning (HVAC) systems in health care facilities*

Z317.13-12

*Infection control during construction, renovation, and maintenance of health care facilities*

Z8000-11 (R2016)

*Canadian health care facilities*