

Handling of waste materials in health care facilities and veterinary health care facilities



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Update No. 1

Z317.10-09

August 2009

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The following revisions have been formally approved and are marked by the symbol delta (Δ) in the margin on the attached replacement pages:

| | |
|----------------|----------|
| Revised | Clause 3 |
| New | None |
| Deleted | None |

CSA Z317.10-09 originally consisted of **50 pages** (ix preliminary and 1 text), each dated **March 2009**. It now consists of the following pages:

| | |
|--------------------|-----------------------|
| March 2009 | iii–ix, 1–4, and 7–41 |
| August 2009 | 5 and 6 |

- Update your copy by inserting these revised pages.
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- (v) transplantation centre; and
- (vi) continuing care centre for management of chronic diseases.

Class A-2 HCF — a facility

- (a) in which patients are
 - (i) accommodated on the basis of medical need;
 - (ii) provided with continuing medical care; and
 - (iii) provided with supporting diagnostic and therapeutic services that can extend beyond 12 h; and
- (b) that does not meet the other requirements of a Class A-1 HCF.

Notes:

- (1) Class A-2 HCFs include facilities for patients rendered incapable of self-preservation as a result of their medical condition.
- (2) Class A-2 HCFs typically provide trauma and emergency services, have surgical operating rooms, and are referred to as “active treatment” or “acute care” institutions.

- △ **Class B HCF** — a facility in which residents, as a result of physical or mental disabilities, are unable to function independently and are accommodated on the basis of medical need for constant care by health care professionals or the need for intensive therapies that require supervision by health care professionals, but where interventional and other invasive procedures are not performed.

Notes:

- (1) Class B HCFs include facilities for patients rendered incapable of self-preservation as a result of their medical condition.
- (2) Class B HCFs include extended care, intermediate care, multi-level care, hospice, mental health, and rehabilitation facilities.

- △ **Class C HCF** — a facility in which ambulatory patients

- (a) are accommodated on the basis of medical need;
- (b) are provided with supportive, diagnostic, non-invasive interventions and treatment services; and
- (c) stay for no more than 12 h.

Notes:

- (1) Class C HCFs include facilities for patients who remain capable of self-preservation.
- (2) Class C HCFs include outpatient clinics, dentist offices, doctors' clinics, group homes, and private residences.

Narcotic — a substance, or anything containing a substance, specified in the *Narcotic Control Regulations*.

Non-contaminated sharp — a material that can puncture, penetrate, or cut the skin and that has not come in contact with blood and body fluids.

Note: Non-contaminated sharps include tools from maintenance and kitchen areas, broken window panes, needles, lancets, laboratory glass, and scalpel blades.

Practitioner — a person who is registered and entitled under the laws of a province/territory to practice in that province/territory the profession of medicine, dentistry, or veterinary medicine, and any other person or class of persons prescribed as a practitioner according to the *Controlled Drugs and Substances Act*.

Pressurized container waste — waste from any container that is under pressure.

Note: Pressurized container waste includes aerosol cans, compressed gases, pressurized bladder containers, and other containers that have an internal pressure greater than the atmospheric pressure.

Prion — a protein present in many human and animal organs and tissues, including the brain, spinal cord, and eyes.

Note: An abnormal form of prion protein is believed to be the agent that causes the transmissible spongiform encephalopathies, a group of central nervous system diseases that includes bovine spongiform encephalopathy and Creutzfeldt-Jakob Disease (CJD). See Annex F for further information on CJD.

Radioactive waste — a liquid, gaseous, or solid material that contains a radioactive nuclear substance as defined by the regulatory authority and that the owner has declared to be waste.

Reusable sharps container — a receptacle designed or intended by the manufacturer to be suitable for reprocessing and reuse.

Note: *Reusable sharps containers are not designed or intended by manufacturers for single use.*

Segregation — the separation of wastes at the point of generation according to waste category.

Sharps — items used in medical care diagnosis or research that can be contaminated with biohazardous or cytotoxic agents and that are capable of causing punctures, cuts, or tears in skin or mucous membranes.

Note: *Sharps include hypodermic, surgical, suture, or IV (intravenous) needles, syringes with needles, pasteur pipettes, lancets, scalpels, blades, and laboratory glass.*

Single-use sharps container — a sharps container designed or intended to be used only once and then disposed of appropriately.

Storage — the accrual of wastes following segregation in a specified container.

Final storage area — the area of a facility where waste is stored immediately prior to disposal.

Intermediate storage area — the area of a facility where waste is stored following its collection from the waste generation area and before being moved to the final storage area.

Note: *The intermediate storage area might include the means by which the waste is transported.*

Targeted substance — a controlled substance, or a product or compound that contains a controlled substance, that is specified in Schedule 1 of the *Benzodiazepines and Other Targeted Substances Regulations*.

Treatment — a process to change the biological or chemical character of waste to eliminate or significantly reduce potential infectious agents or harm contained in the waste.

Waste generation area — the area of a facility where waste originates.

Note: *Examples of waste generation areas are client rooms and laboratories.*

Veterinary health care facility — the physical infrastructure intended to support the delivery of health-related services to animals.

Note: *Veterinary health care facilities include*

- (a) *companion animal, mixed, or large animal hospital or offices;*
- (b) *companion animal emergency facilities; and*
- (c) *spay-neuter clinics.*

4 Waste management

4.1 General

4.1.1

All waste shall be

- (a) segregated at the point of generation;
- (b) contained in packaging that holds the contents until the point of disposal; and
- (c) disposed of in a manner that is practical and efficient, yet minimizes hazards.

4.1.2

The facility's administration shall develop a comprehensive waste management plan that demonstrates a commitment to sustainability through the reduction, reuse, and recycling (where applicable) of products and supplies.

Note: *Minimizing the handling of waste results in fewer people being exposed to it.*

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***Handling of waste materials in
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veterinary health care facilities***



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The Technical Committee would like to acknowledge the visionary leadership of Ain Allas, who passed away in January 2009. His dedication to the development of this and other standards will remain a valuable contribution to the field of standardization.

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Preface

This is the third edition of CSA Z317.10, *Handling of waste materials in health care facilities and veterinary health care facilities*. It supersedes the previous editions, published in 2001, and in 1988 under the title *Handling of Waste Materials Within Health Care Facilities*. It is one of a series of Standards related to health care facility engineering and sets forth preventive measures intended to protect patients, staff, and visitors from exposure to potentially hazardous waste materials.

This Standard specifies requirements for the packaging, collection, storage, handling, treatment, and disposal of waste materials within health care facilities and veterinary health care facilities. This Standard is intended to assist health care facilities and veterinary health care facilities to reduce the environmental impact of and manage the health and safety risks associated with the improper management of waste. The requirements of this Standard are based on other CSA Standards, the precautionary principle, and health and safety principles.

Major changes in this edition include

- (a) restructuring according to waste category;
- (b) updating the definitions; and
- (c) revisions based on the recognition that health care is increasingly being administered outside of traditional acute care hospitals.

This Standard was prepared by the Subcommittee on Waste Handling in Health Care and Veterinary Health Care Facilities, under the jurisdiction of the Technical Committee on Health Care Facility Engineering and Physical Plant and the Strategic Steering Committee on Health Care Technology, and has been formally approved by the Technical Committee.

March 2009

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 publication 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 publication.
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 - (b) provide an explanation of circumstances surrounding the actual field condition; and
 - (c) be phrased where possible to permit a specific “yes” or “no” answer.

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are published in CSA's periodical Info Update, which is available on the CSA Web site at www.csa.ca.

Z317.10-09

Handling of waste materials in health care facilities and veterinary health care facilities

1 Scope

1.1

This Standard specifies requirements for the packaging, collection, handling, storage, and on-site treatment and disposal of waste materials within health care facilities and veterinary health care facilities.

1.2

This Standard applies to health care facilities and veterinary health care facilities.

Note: *This Standard may also be applied to the following:*

- (a) *medical research and teaching facilities;*
- (b) *veterinary research and teaching facilities;*
- (c) *some research laboratories where the waste generated is within the scope of this Standard;*
- (d) *vaccine production facilities;*
- (e) *vaccine testing facilities;*
- (f) *mortuaries and funeral homes;*
- (g) *coroners' offices;*
- (h) *blood banks;*
- (i) *blood collection centres; and*
- (j) *personal service facilities (e.g., providing tattoo, ear/body piercing, aesthetic, and electrolysis services).*

1.3

This Standard does not provide technical requirements for off-site transportation or disposal of waste after removal from a facility.

Notes:

- (1)** *Such requirements are specified in federal, provincial/territorial, and municipal regulations and legislation.*
- (2)** *Facilities may consider practices that minimize the environmental impact of the waste generated.*

1.4

This Standard does not address the special precautions associated with material contaminated with infectious substances requiring a Containment Level 3 or higher.

Note: *For further information, see The Laboratory Biosafety Guidelines (Health Canada), the Containment Standards for Veterinary Facilities (Canadian Food Inspection Agency), and the Transportation of Dangerous Goods Act and the Transportation of Dangerous Goods Regulations, Schedule 7.*

1.5

In CSA Standards, "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; "may" is used to express an option or that which is permissible within the limits of the standard; and "can" is used to express possibility or capability. Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to