



CMDRT Exam Study Reference Guide

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Introduction

CSA's Certified Medical Device Reprocessing Technician (CMDRT) is the first and only national certification program for persons conducting the sterile processing of reusable medical devices, based on Canadian Standards and best practices.

The CMDRT Examination is a two hour, multiple-choice examination. It is offered to candidates on-demand at computer testing centres across Canada. CSA may offer proctored paper-and-pencil examination sessions for large groups on request.

The purpose of this study reference is to assist candidates in locating study material and technical information that will help them to prepare for the examination. The topics covered in the exam are listed along with the references for foundational materials and resources.

This resource listing is not exhaustive and the references are not intended to replace a comprehensive knowledge of medical device reprocessing. This guide is only intended to help candidates to prepare for the knowledge examination. CSA is not responsible for any errors or omissions in this guide.

For further information on the CMDRT and other study resources, including "How to prepare for the CMDRT", please consult our website at http://www.csa-america.org/personnel_certification/cmdrt/.

Explanation of Cross Referenced Table

(08Feb 2011)

Exam Content Areas

The exam content areas in the embedded table were developed by a group of industry experts. The weighting of each content area (expressed as a %) was determined through industry survey. Under each content area, the relevant knowledge and skills objectives are listed.

The knowledge related to each content area can be acquired in many ways. Most likely, exam candidates will want to study a foundation textbook. There are many textbooks, courses and other references that will provide the candidate with the foundation information. Three are listed in the following table:

- The CSAO “Manual for Reprocessing Medical Devices”
- The Vancouver Community College “Sterile Supply Technician Program Modules”
- The Sterile Processing University textbook “The Basics of Sterile Processing”

A candidate need only choose one foundation text to study from. Reference page numbers from each text are listed opposite each knowledge objective.

In addition to a foundation text, the candidate must be familiar with the relevant CSA Standards. Those standards are:

- CSA Z314.3-09 Effective sterilization in health care facilities by the steam process.
- CSA Z314.8-08 Decontamination of reusable medical devices

References linking the knowledge objectives to the relevant sections of the CSA standards are also found in the following table.

Exam Content Table

(08 Jan 2011)

Exam content			Suggested reference pages for study (These are not all inclusive)			
			Choose 1 foundation textbook to study (The 3 listed here are examples only)			Standards and Guidelines
			Manual for reprocessing Medical Devices (CSAO) ¹	SST Program Modules (VCC) ²	Basics of Sterile Processing ³	CSA: <ul style="list-style-type: none"> • Z314.3-09⁴ (Steam Ster) • Z314.8-08⁵ (Decontam)
1, Quality Systems 4%						
	1.01	Describe the elements of a quality system that apply to daily practice	64 217-219		16	Section 4.5 of CSA Decontam or Steam Ster
2. Infection Prevention and Control 17%						
	2.01	Describe basic microbiology concepts related to reprocessing of medical devices	41-48 51-56	Module 2	54-55, 71-76	NA
	2.02	Describe how and when to use "Routine Practices"	57-59	Modules 3 & 4	78-84	Section 6.6 of CSA Decontam or Steam Ster
	2.03	Describe how and when to practice hand hygiene	57	Pages 3-10 & 3- 11	77-78	See 2.02
	2.04	Describe how to select and use Personal Protective Equipment (PPE)	57-58 72-73	Module 4 and pages 5-4 & 5-5	88-90	See 2.02
	2.05	Describe safe management of sharps	72	Pages 4-3 & 4-4	14	See 2.02
	2.06	Recognize instances of exposure to body fluids and describe how to appropriate action following exposure	72, 74		78-84	See 2.02

¹ Coutoulas, L, Hampton L, and Landers C. eds. *The Manual for Reprocessing Medical Devices 1st Edition*. Central Service Association of Ontario (CSAO) 2009

² Vancouver Community College. *Sterile Supply Technician Program Modules 5th Revision* 2010.

³ Chobin, N ed. *The Basics of Sterile Processing 3rd Edition*. Sterile Processing University LLC. Lebanon, NJ. 2009

⁴ CSA Z314.3-09 Effective Sterilization in Health Care Facilities by the Steam Process

⁵ CSA Z314.8-08 Decontamination of Reusable Medical Devices

	2.07	Describe how to prevent contamination and cross contamination	75-81	Pages 5-4, 5-5,		NA
	2.08	Given a scenario, identify breaks in good infection prevention and control practice.				
3. Occupational Health and Safety 2%						
	3.01	Describe relevant occupational health and safety practices	74	Integrated		Integrated throughout, and includes Section 6 of CSA Decontam or Steam Ster, and Sections 10.8.2.6 and 13.3.3 of Decontam
4. Decontamination Processes 16%						
	4.01	Describe how to select and use appropriate agents for decontamination	86-96	Pages 5-7 to 5-15	94-97	CSA Decontam Sections 10.4.3.2 to 10.4.3.4
	4.02	Describe the different types and functions of decontamination equipment	97-109	Module 6	100-110	CSA Decontam Sections 10.4.3 and 10.4.4
	4.03	Describe how to collect, transport and receive soiled medical devices	79-81	NA	90-91	CSA Decontam Sections 8 and 9
	4.04	Describe the steps for decontamination of soiled medical devices	83-86 124-126	Pages 5-6 to 5-9, 8-4 to-8-6	91-98	CSA Decontam Section 10
	4.05	Describe how to use decontamination equipment	97-109	Module 6	100-110	CSA Decontam Sections 7.5, 10.4.3, 10.4.4
	4.06	Describe how to manually clean medical devices	85-86 110-118	Pages 5-6 to 5-9 8-4 to-8-6	98-100 110-116 131-134	CSA Decontam Section 10.4.2
	4.07	Given a scenario, identify incorrect practices in decontamination				
5. High Level Disinfection 10%						
	5.01	Identify devices that require high level disinfection	84	Pages 4-5, 5-16 to 5-30	120	CSA Decontam Section 10.6.1
	5.02	Describe how to select and use appropriate chemicals for high level disinfection	92-93	Pages 4-5, 5-16 to 5-30	120-122	CSA Decontam Section 10.8
	5.03	Describe how to manually high level disinfect semi-critical devices	165-167 178-179	Pages 4-5, 5-16 to 5-30,	124-129	CSA Decontam Sections 10.8.5, 12,

				9-2 to 9-3		
	5.04	Describe how thermal high level disinfection can be achieved	106-108 118-121	Pages 6-11 to 6-12		CSA Decontam Section 12.5.3
	5.05	Describe the different types and functions of automated high level disinfecting equipment		Pages 6-11 to 6-12, pages 19-16 to 19-17	107 (AER)	CSA Decontam Sections 12.6.2, 12.6.3, 13.4.8
6. Assembly 22%						
	6.01	Describe how to sort, inspect and test medical devices	132-136	Module 10	135-150 152-155	CSA Decontam Section 10.7 CSA Steam Ster Section 8
	6.02	Distinguish between single-use, multi-use and "resposable" (limited reuse) medical devices	NA	NA	NA	NA
	6.03	Describe how to assemble a set/tray		Page 10-7	155-159	CSA Steam Ster Sections 8.4, 9.54
	6.04	Describe how to identify, select and place chemical indicators	198 259-262	Page 16-10	159	CSA Steam Ster Sections 9.5.5, 12.6 and Annex E
	6.05	Describe how to safely operate assembly area equipment				NA
	6.06	Given a scenario, describe how to prioritize assembly workload				
	6.07	Describe how to properly package medical devices for sterilization or other uses	187-197 206-210	Module 11	159-171	CSA Steam Ster Sections 9 and Figures 2 & 3
	6.08	Given a scenario, describe appropriate assembly practices				
7. Sterilization of Medical Devices 18%						
	7.01	Explain the importance of medical device compatibility and validation	NA	NA	NA	Section 5 of CSA Decontam or Steam Ster. CSA Steam Ster Annex D.2.2
	7.02	Describe the different types of steam sterilizers and the critical parameters needed for steam sterilization	219-222 224-227	Pages 13-10 to 13-11	173-184	NA
	7.03	Identify the main components and describe the function of a steam sterilizer	223-224	Pages 13-3 to 13-9		NA
	7.04	Explain how to manage loads and to operate steam sterilizers	214-216 228-230 232	Pages 12-5 to 12-8	186-188 202-203 229-230	CSA Steam Ster Section 10
	7.05	Describe the elements of a steam sterilization quality	233	Module	188-202	CSA Steam Ster Section 12

		assurance program	257-264	16	230-231	
	7.06	Describe the different types of low temperature sterilizers and the critical parameters needed for each method	235-254	Modules 14 and 15	210-229	NA
	7.07	Explain how to select, manage, load and operate low temperature sterilizers	235-254	Modules 14 and 15	210-229	NA
	7.08	<i>Not used</i>				
	7.09	Given a scenario, identify appropriate responses to an adverse sterilization event	231 wet pks	Pages 13-20 to 13-21 (wet packs)	184-186 wet packs 204 holes	CSA Steam Ster Section 12.9
8. Storage, Transportation and Distribution 6%						
	8.01	Describe elements of storage and inventory management of medical devices	283-288	Module 17	234-241	CSA Steam Ster Sections 10.4, 11.1/2/3
	8.02	Describe elements of transportation and distribution of medical devices	288-292	Module 17	242-252	CSA Steam Ster Section 11.4
	8.03	Given a scenario, identify best practices in storage and transportation of medical devices				
9. Flexible Endoscopes 5%						
	9.01	Describe how to reprocess flexible endoscopes and accessories	169-181	Pages 19-12 to 19-19	258-279	CSA Decontam Section 13.4
	9.02	Given a scenario, identify best practice for reprocessing flexible endoscopes.				