

How to Prepare for the CMDRT

A Guide for Candidates Preparing to Challenge CSA's Certified Medical Device Reprocessing Technician National Exam

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Purpose of the Certification

- promote public health
- create a national standard for medical device reprocessing technicians
- lend authority and credibility to the profession
- meet the needs of industry and regulators for relevant, standardized training and
- reduce the number of hours needed for on-the-job training

Background

- Significant interest from CSA Technical Committee on Sterilization, January 2008
- Central Service Association of Ontario (CSAO) came forward as champions to further explore the need
- CSA assessment completed, July 2008
- Committee unanimously endorsed development of a national personnel certification program
- CSA began development, September 2008
- First Scheme Committee meeting, October 2008

Benefits

- Positive patient outcomes
- Improved practitioner health and safety
- Labour force mobility
- Quality assurance
- Increased performance
- Greater career opportunities
- Human resources support

CMDRT Website

www.csa-america.org/personnel_certification/cmdrt/

- Available information includes:
 - CMDRT Program Fact Sheet
 - Frequently Asked Questions (FAQ)
 - Registry of certified CMDRT's
 - Program Handbook / Application / Skills Checklist

CMDRT Factsheet

CERTIFIED MEDICAL DEVICE REPROCESSING TECHNICIAN (CMDRT)

*Promoting Public Health and Safety
through Professional Certification*

PERSONNEL CERTIFICATION SERVICES | Program Development - Individual Assessment



Reinforcing Infection Control Practices

A healthcare acquired infection is an often unpleasant, unnecessary and sometimes fatal outcome of a hospital visit. The Canadian Nosocomial Surveillance Program estimates that 220,000 Canadians develop hospital-acquired infections each year and 8,000 of them will die. The vast body of literature documenting hospital acquired infections makes a compelling case for the need for a national program to validate the competency of personnel responsible for the cleaning, disinfection and sterilization of medical instruments and devices. To meet this need, the CMDRT Personnel Certification has been developed by CSA and CSA America in conjunction with industry stakeholders to provide assurance that an individual possesses the knowledge, skills and abilities deemed necessary to perform the critical function of a Medical Device Reprocessing Technician.



Strengthen your Credentials

If you are already working in the sterile services industry, why not take your career one step further and be formally recognized for the important work you do to promote patient health and safety, by becoming a *Certified Medical Device Reprocessing Technician*. The CMDRT is the first Canadian national certification program for personnel

CMDRT FAQ

The screenshot shows a web browser window with the URL http://www.csa-america.org/personnel_certification/cmdrt/default.asp?load=faq. The page features the CSA Standards logo and a navigation menu with the following items: Home, Standards, Personnel Certification Programs (highlighted), Climate Change, Services, Getting Involved, News and Events, and About Us. A search bar is located in the top right corner with the text "Purchase CSA Standards | Sitemap | Contact Us" and "CSA Group Divisions" above it. Below the navigation menu, a breadcrumb trail reads: "You are here: Home > Personnel Certification Programs > Certified Medical Device Reprocessing Technician (CMDRT) > CMDRT Program FAQ's".

Personnel Certification Programs

- ▶ Certified CNG Fuel System Inspector
- ▶ Gas Laboratory Technician
- ▶ Greenhouse Gas (GHG) Verifier
- ▶ Certified Medical Device Reprocessing Technician (CMDRT)
- ▶ Greenhouse Gas Inventory Quantifier

CMDRT Program FAQ's

What is CSA's CMDRT?

The CMDRT (Certified Medical Device Reprocessing Technician) is a voluntary certification program for personnel involved in reprocessing (decontaminating, cleaning, sterilizing) re-usable medical devices. Its goal is to protect patients and to promote safe and effective practice.

Who Needs to be Certified?

Anyone who reprocesses re-usable medical devices should seriously consider this valuable credential (primary health-care facilities, private clinics, dental surgeries, etc.)

What if I'm already Certified?

CSA does not recognize the equivalency of other certifications. There is no way for CSA to verify the competency of personnel certified under competing schemes.

What is the Value of the CMDRT?

For **practitioners**, the value of the CMDRT is being able to demonstrate and to be recognized for competency in all areas of medical device reprocessing. The CMDRT is a national, third-party credential that is fully portable and entitles certificate-holders to use the designation "CMDRT".

More Information

- ▶ Fact Sheet - English
- ▶ Fact Sheet - French
- ▶ CMDRT Program FAQ's
- ▶ Find A Certified Medical Device Reprocessing Technician
- ▶ Product Pricing

Downloads

- ▶ Program Handbook/Application - English
- ▶ Program Handbook/Application - French

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CMDRT Program Handbook



Qualifications of a CMDRT

A qualified technician can perform the following activities without assistance, including (but not limited to):

1. Applying the principles of basic microbiology and infection prevention and control to decrease risk to both patients and staff during routine reprocessing procedures
2. Following written department policies and standard operating procedures
3. Handling and transporting contaminated medical devices
4. Decontaminating reusable medical devices

Qualifications of a CMDRT (continued)

A qualified technician can perform the following activities without assistance, including (but not limited to):

5. Selecting and safely using reprocessing products (e.g. detergents, low and high level disinfectants)
6. Disinfecting medical devices

Qualifications of a CMDRT (continued)

A qualified technician can perform the following activities without assistance, including (but not limited to):

7. Preparing and packaging medical devices
8. Inspecting instruments and devices for cleanliness, function and damage
9. Sterilizing medical devices

Qualifications of a CMDRT - Continued

A qualified technician can perform the following activities without assistance, including (but not limited to):

10. Monitoring and documenting quality

11. Storing and distributing medical devices

12. Recognizing and responding to occupational health and safety hazards or events

13. Troubleshooting common problems

14. Using common reprocessing equipment

Education and/or Experience Pre-requisites

OPTION 1:

1. Education: High School Graduate or equivalent (e.g. GED). **AND**
2. Training: Successful completion of a recognized medical device reprocessing educational program. **AND**
3. Experience: Successful completion of a practicum and/or work experience in medical device reprocessing totaling a minimum of 500 hours. Evidence of experience shall be provided via a performance checklist.

OPTION 2:

1. Experience: Four thousand (4000) hours work experience in medical device reprocessing within the last 5 years (equal to approximately .4 full time equivalent). Evidence of experience shall be provided via a performance checklist.

Recommended Resources for Study

CSAO: The Manual for Reprocessing Medical Devices –
First Edition, and Companion Workbook,
\$195.00

contact the C.S.A.O. office at:
csao@ntl.sympatico.ca

CBSPD: The Basics of Sterile Processing,
3rd Edition, approx. \$95.00 US

Workbook for the Basics of Sterile
Processing, 3rd Edition, approx. \$30.00 US

Available from: CBSPD.

www.sterileprocessing.org

CSA Standards

- Z314.3 Effective Sterilization in Health Care Facilities by the Steam Process, approx. \$105 CAD
- Z314.8 Decontamination of Reusable Medical Devices, approx. \$95 CAD

Contact CSA: www.shopcsa.ca

Your MDR Department should have a copy on hand for your reference

PIDAC

- Best Practices for Cleaning, Disinfection and Sterilization of Medical Equipment/Devices in all Healthcare Settings,
 - First published, April, 2006;
 - Reviewed and Revised, February, 2010
- PDF available at no charge from http://www.health.gov.on.ca/english/providers/program/infectious/diseases/best_prac/bp_cds_2.pdf

PHAC – Hand Washing

- Hand Washing, Cleaning, Disinfection and Sterilization in Health Care, Public Health Canada, 1998, under revision
- PDF available at no charge from:
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/98pdf/cdr24s8e.pdf>

See also: CHICA-Canada, Hand Hygiene Resources:
http://www.chica.org/links_handhygiene.html

SCGNA – Reprocessing Flexible Endoscopes

- Standards of Infection Control in Reprocessing of Flexible Gastrointestinal Endoscopes, 2007
- .PDF available from Society of Gastroenterology Nurses and Associations, Inc. (SCGNA) from:

http://www.sgna.org/Resources/3_stdofinfectionFINAL1208_2.pdf

Secondary Resources

- CDC Disinfection and Sterilization Guidelines
- ORNAC, CSGNA, and CHICA Guidelines and Standards
- Legislation/Regulatory requirements
- Other CSA Standards, including:
 - Z314.2 Effective Sterilization in Health Care Facilities by the Ethylene Oxide Process
 - Z314.10 Selection, Use, Maintenance, and Laundering of Reusable Textile Wrappers, Surgical Gowns, and Drapes for Health Care Facilities
 - Z314.14 Selection and Use of Rigid Sterilization Containers
 - Z314.15 Warehousing, Storage, and Transportation of Clean and Sterile Medical Devices
 - Z314.22 Management of Loaned, Shared and Leased Medical Devices

Body of Knowledge – Exam Blueprint

1 Quality Systems - 4%

1.01 Describe the elements of a quality system that apply to daily practice.

Body of Knowledge – Exam Blueprint

2 Infection Prevention and Control - 17%

- 2.01 Describe basic microbiology concepts related to reprocessing of medical devices.
- 2.02 Describe how and when to use Routine Practices.
- 2.03 Describe how and when to practice hand hygiene.
- 2.04 Describe how to select and use Personal Protective Equipment (PPE).
- 2.05 Describe safe management of sharps.
- 2.06 Recognize instances of exposure to body fluids and describe how to take appropriate action following exposure.
- 2.07 Describe how to prevent contamination and cross contamination.
- 2.08 Given a scenario, identify breaks in good infection prevention and control practice.

Body of Knowledge – Exam Blueprint

3 Occupational Health and Safety 2%

3.01 Describe relevant occupational health and safety practices.

Body of Knowledge – Exam Blueprint

4 Decontamination Processes- 16%

- 4.01 Describe how to select and use appropriate agents for decontamination.
- 4.02 Describe the different types and functions of decontamination equipment.
- 4.03 Describe how to collect, transport, and receive soiled medical devices.
- 4.04 Describe the steps for decontamination of soiled medical devices.
- 4.05 Describe how to use decontamination equipment.
- 4.06 Describe how to manually clean medical devices.
- 4.07 Given a scenario, identify incorrect practices in decontamination.

Body of Knowledge – Exam Blueprint

5 High Level Disinfection - 10%

- 5.01 Identify devices that require high level disinfection.
- 5.02 Describe how to select and use appropriate chemicals for high level disinfection.
- 5.03 Describe how to manually high level disinfect semi-critical devices.
- 5.04 Describe how thermal high level disinfection can be achieved.
- 5.05 Describe the different types and functions of automated high level disinfecting equipment.

Body of Knowledge – Exam Blueprint

6 Assembly - 22%

- 6.01 Describe how to sort, inspect, and test medical devices.
- 6.02 Distinguish between single-use, multi-use, and reusable medical devices.
- 6.03 Describe how to assemble a set/tray.
- 6.04 Describe how to identify, select, and place chemical indicators.
- 6.05 Describe how to safely operate assembly area equipment.
- 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.
- 6.08 Given a scenario, describe appropriate assembly practices.

Body of Knowledge – Exam Blueprint

7 Sterilization of Medical Devices - 18%

- 7.01 Explain the importance of medical device compatibility and validation.
- 7.02 Describe the different types of steam sterilizers and critical parameters needed for sterilization.
- 7.03 Identify the main components and describe the function of a steam sterilizer.
- 7.04 Explain how to manage load and operate steam sterilizers.
- 7.05 Describe the elements of a steam sterilization quality assurance program.
- 7.06 Describe the different types of low temperature sterilizers and critical parameters needed for each method.
- 7.07 Explain how to select, manage load, and operate low temperature sterilizers.
- 7.08 Not Used
- 7.09 Given a scenario, identify appropriate responses to an adverse sterilization event.

Body of Knowledge – Exam Blueprint

8 Storage, Transportation and Distribution 6%

- 8.01 Describe elements of storage and inventory management of medical devices.
- 8.02 Describe elements of transportation and distribution of medical devices.
- 8.03 Given a scenario, identify best practices in storage and transportation of medical devices.

Body of Knowledge – Exam Blueprint

9 Flexible Endoscopes 5%

9.01 Describe how to reprocess flexible endoscopes and accessories.

9.02 Given a scenario, identify best practice for reprocessing flexible endoscopes.

Sample Test Question

What is the single most important procedure for preventing the spread of infection?

1. Wearing gloves
2. **Washing hands**
3. Immunization
4. Wearing a mask

Sample Test Question

Which device presents the greatest risk of percutaneous exposure to contaminated sharps?

1. Trocar with sheath
2. Toothed tissue forcep
- 3. Scalpel handle with blade**
4. Insufflation needle

Sample Test Question

A soiled case cart is received from the operating room. An instrument set is in the cart with a note indicating that the set has not been used.

What is the appropriate handling of this set?

1. Package for sterilization
2. Reprocess if visibly soiled
3. Return to the sterile storage area
4. **Reprocess as usual**

Application and Performance Skills Checklist – Refer to Program Handbook



Performance Checklist to accompany CMDRT Application

Medical Device Reprocessing Technician Performance Checklist			
This checklist shall be completed by a Supervisor, Program Manager or Educational Director and shall accompany the candidate's application for certification.			
Items in Bold-faced type denote core competencies and must be checked-off as satisfactory before the candidate is eligible to sit for the examination			
Name of Candidate: (include on all pages)			
OBJECTIVE	COMPETENCY	Satisfactory	
		Yes	No
1. Quality systems	Subsumed under various competencies below		
2. Infection prevention & control			
3. Occupational health & safety			
4. Decontamination	1. Implements "Routine Infection Control Practices"		
	2. Follows written work instructions		
	3. Prepares work area		
	4. Collects, transports and		

Application Process

- Each new application is valid for six (6) months from the time it is received.
- Program Fees
 - Initial Application Fee (non-refundable) \$ 68.00 CAD
 - Examination and Certification Fee \$ 195.00 CAD
 - Re-examination Fee \$ 95.00 CAD
 - Re-certification Fee by Exam or Continuous Learning \$ 263.00 CAD

Testing

- Computer based testing facilities - Castle Worldwide
- 19 testing centres across Canada
http://www.castleworldwide.com/mainsite/ibtsites/default_v1.aspx
- 99 question closed-book, multiple-choice test
- 2 hours time limit
- Results available immediately following computer tests
- Paper-and-pencil tests available on request

Re-Certification

Re-certification is required every 5 years

OPTIONS:

- Experience: Requires candidate to have a minimum of 4000 hours in a re-processing area during the 5 year term, **AND**
- Training: Evidence of continuous learning (minimum 100 hours over the 5-year term)
OR
- Exam: Successfully challenge the certification exam

For Further Information on the CMDRT

For further information on the CMDRT and how to become a Certified Medical Device Reprocessing Technician, please contact:

Miles Murphy, Product Manager,
Personnel Certification

1-416-747-2320

miles.murphy@csa.ca

Or visit our website at

http://www.csa-america.org/personnel_certification/cmdrt/

For further information on How to Prepare for the CMDRT, please contact:

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