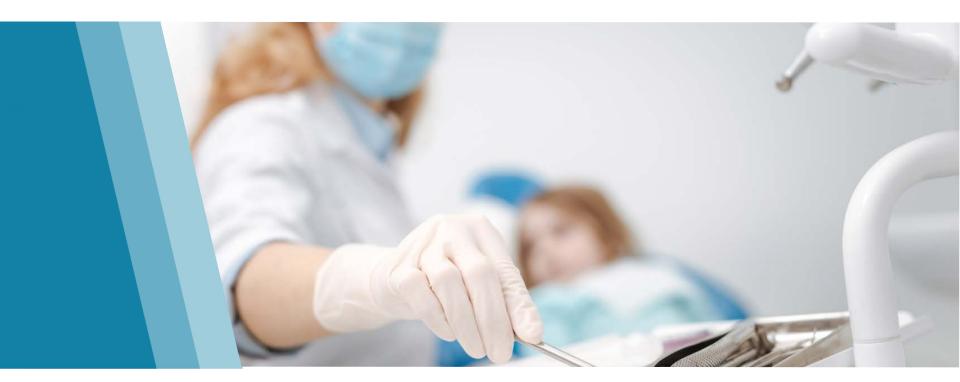
#### **Infection Prevention and Control for Dental Offices**



Catherine Richard PT CIC IPAC Regional Specialist (East Team), Public Health Ontario March 21, 2019 Belleville, Ontario

#### **Conflicts of Interest**

- No conflicts of interest to declare
- No affiliation with or endorsement of any private organization or products

#### **Objectives**

Participants will be able to:

- Describe the components of Infection Prevention and Control (IPAC) Best Practices in Clinical Office Settings
- Identify the role of Public Health Ontario (PHO) and be familiar with its resources – learning tools, best practices and checklists

## **Public Health Ontario (PHO)**

- We provide scientific and technical advice and support to clients working in government, public health, health care, and related sectors.
- Our partners:
  - Ministry of Health and Long Term Care
  - Public Health Units
  - Associations e.g. IPAC Canada
  - Regulatory colleges
- Our stakeholders:
  - Public Health Units
  - Healthcare sector e.g. hospitals, clinics, LTC



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#### **Public Health Ontario's IPAC Team**

IPAC Research	<ul> <li>Research, surveillance, evaluation, support to PIDAC (synthesizing and generating new knowledge and data collection)</li> </ul>
IPAC Programs & Resources	<ul> <li>Translating knowledge into practical tools, resources, and programs for the field.</li> </ul>
IPAC Response & System Support	<ul> <li>Support complex inquiries and emerging issues (e.g. Personal Service Settings inquiries, IPAC lapses)</li> </ul>
IPAC Regional Support	<ul> <li>Support the adoption of IPAC best practice (extensive consultation, disseminate information and facilitate local knowledge translation, implementation support)</li> </ul>

## **Importance of following IPAC Best Practices in Clinical Office Settings**

Prevent or minimize the risk of transmission of infections to patients and staff

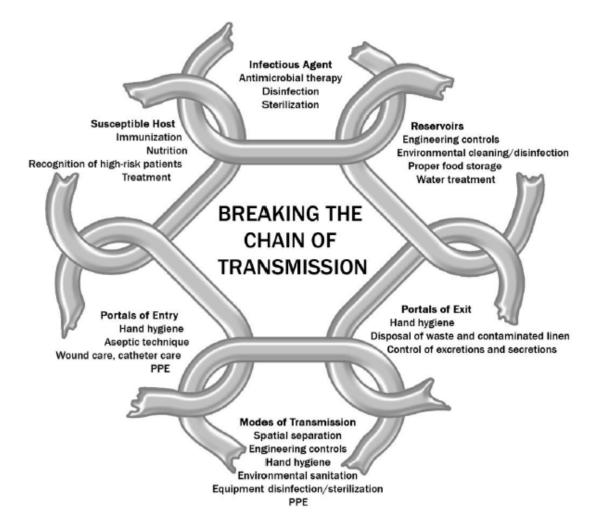
"There is an expectation by the public that the level of care and patient safety provided in a clinical office setting is equivalent to that provided in a hospital setting."

#### **IPAC and Occupational Health & Safety**

- Closely linked in health care settings
- Be aware of requirements under the Occupational Health & Safety Act and associated Regulations for employers, supervisors and workers
- Public Services Health & Safety Association, Ministry of Labour



#### **Chain of Transmission**



#### **Routine Practices**

The system of infection prevention and control practices recommended by the Public Health Agency of Canada to be used with all clients/patients/residents during all care to prevent and control transmission of microorganisms in all health care settings:

- Hand hygiene
- Personal Protective Equipment (PPE) based on risk assessment
- Environmental cleaning
- Sharps injury prevention
- Reprocessing of shared equipment

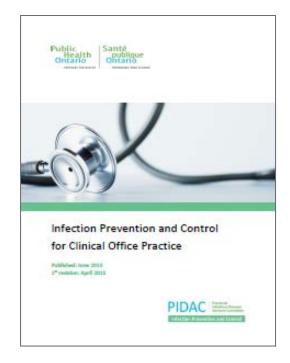
# Where to Find PHO IPAC Resources

- Go to: www.publichealthontario.ca
- Select Health Topics on left
- Select Infection Prevention and Control



# **Provincial Infectious Diseases Advisory Committee** (PIDAC) Best Practice Documents

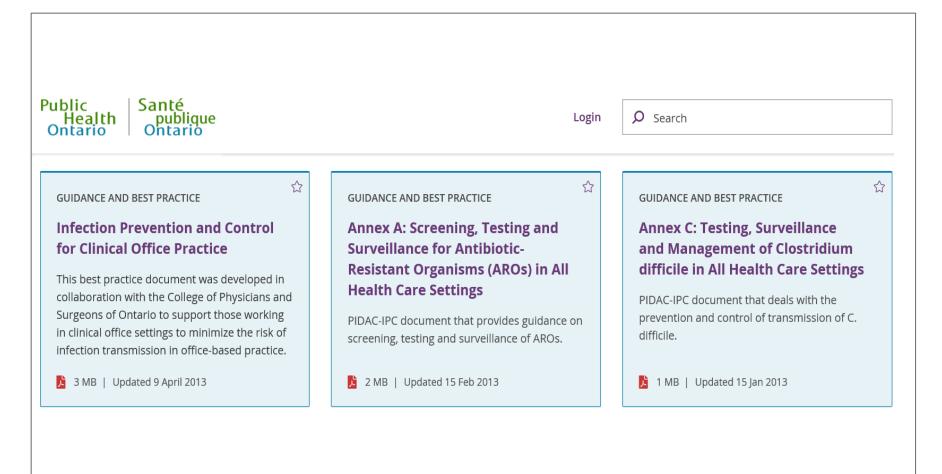




#### **PIDAC**



#### **PIDAC Best Practices**



#### **PIDAC**

#### **Best Practices in IPAC**

Best practice documents are intended for use by health care providers and facilities/organizations providing health care including hospitals, long-term care homes and community-based health care organizations. Recommendations in best practice documents are developed through reviews of literature and consultations with experts in infectious disease, surveillance, communicable disease and immunization.

#### **Best Practice Documents**

GUIDANCE AND BEST PRACTICE	GUIDANCE AND BEST PRACTICE	GUIDANCE AND BEST PRACTICE
Best Practices for	Best Practices for	Best Practices for
Environmental Cleaning	Prevention, Surveillance	Infection Prevention and
for Prevention and	and Infection Control	Control in Perinatology
Control of Infections in	Management of Novel	This document provides evidence-

#### **Checklists**

Public Santé Health publique Ontario Ontario

#### CHECKLIST

#### Infection Prevention and Control (IPAC) Core Elements in Dental Practice Settings

This checklist was developed as a tool to assist public health units and stakeholders in conducting inspections related to IPAC lapse investigations. Unless otherwise indicated, the resource used was the Provincial Infectious Disease Advisory Committee's (PIDAC's) Infection Prevention and Control for Clinical Office Practice. Revised April 2015, Specific sections are cited for where the information may be found within the document.

The checklist was developed in collaboration with Royal College of Dental Surgeons of Ontario, The College of Dental Hygienists of Ontario and Ontario Ministry of Health and Long-Term Care. For more information about this resource, please contact joac@cahoo.ca.

Clinic Name:			
Clinic Address:			
Date of Inspection:	Inspection Type:		
Name of Inspector:			
Chile Contacts (some and above sumbary):			

- Legislated Requirement (Leg): Must be compliant with the relevant Act or regulation (e.g., Occupational Health and Safety Act).
- High Risk (High): Immediate health hazard exists. Stop practice and correct immediately. The act or failure to act immediately may lead to the transmission of infection or risk of ilness or injury. Practices that cannot be corrected immediately must be stopped until the health hazard is observed to have been eliminated. An Order may be warranted/issued.
- Medium Risk (Med): Practices must be corrected. Timelines for compliance or agreement on alternate process to be determined during inspection.
- Inform and Educate (I/E): Provide information on best practices and mandatory legislated practice requirements. This may also include just-in-time education.

NOTE: These categorizations represent the minimum risk level. Based on good judgement and circumstance, public health units may increase the risk category.

Checklist: IPAC Core Elements in Dental Practice Settings



#### CHECKLIST

#### Reprocessing in Dental Practice Settings

This checklist was developed as a tool to assist public health units and stakeholders in conducting inspections related to inflection prevention and control lapse investigations. Unless otherwise indicated, the resource used was the Provincial Infectious Disease Advisory Committee's (PIDAC's) <u>Best Practices for Cleaning, Disinfection and Sterilization of Medical Equipment/Devices (May 2013)</u>. Specific sections are cited for where the information may be found within the document.

The checklist was developed in collaboration with Royal College of Dental Surgeons of Ontario, The College of Dental Hygienists of Ontario and Ontario Ministry of Health and Long-Term Care. For more information about this resource, please contact josc@cohop.ca.

Cinic Name:				
Cinic Address:				
Date of Inspection:	Inspection Type:			
Name of Inspector:				
Cinic Contacts (name and phone numbers):				

- Legislated Requirement (Leg): Must be compliant with the relevant Act or regulation (e.g., Occupational Health and Safety Act).
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  process to be determined during inspection.
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NOTE: These categorizations represent the minimum risk level. Based on good judgement and circumstance, public health units may increase the risk category.

Checklist: Reprocessing in Dental Practice Settings

### **Checklist Contents**

- Core elements:
  - 20 Sections:
    - Including Policies, Education, Environmental Cleaning, Routine Practices, PPE, Reprocessing\*, Safe Use of Medications, Sharps and Occupational Health & Safety.
- Reprocessing

#### **Top 3 Practice Issues Across Healthcare**

- Environmental Cleaning
  - Not using a health care grade disinfectant in clinical areas
- Unsafe Medication Practices
  - Pre-loading of syringes
  - Expired medications; expired local anesthetics
  - Medication preparation and storage not in clean separate area
  - Reuse of needles or syringes

#### **Top 3 Practice Issues Across Healthcare**

- Reprocessing
  - Equipment to be sterilized is not properly cleaned
  - Sterilizers do not demonstrate parameters of sterilization; no printouts; spore testing not done; improper use of chemical integrator
  - Sterilizers do not either have manufacturer's instructions or follow them; no maintenance schedule or documentation
  - Sterilizers are not Health Canada approved
  - There is no training or certification of those performing sterilization
  - Improper packaging-too many in pack, not disassembled

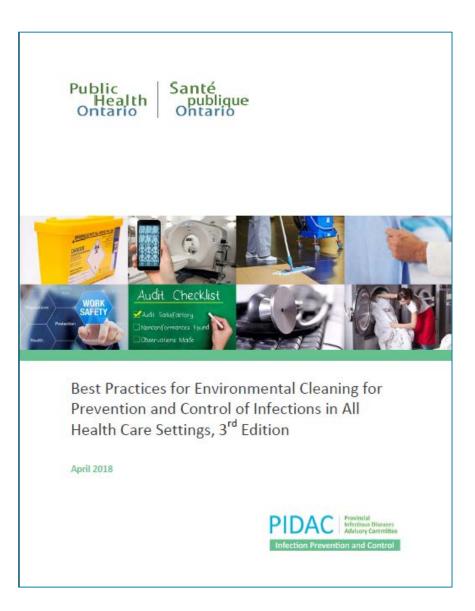
### Hand Hygiene

- One of the most important methods of preventing infections, but still opportunity for improvement across the health care system
- ABHR is recommended unless hands are visibly soiled
- Four moments for hand hygiene
- Gloves are not a substitute for hand hygiene

### **Personal Protective Equipment (PPE)**

- Staff must be trained on PPE use
- Use risk assessment to determine appropriate PPE for task
- PPE should be used for decontaminating equipment
- PHO website has resources including videos and online modules that can be used for training





### **Environmental Cleaning**

**1.** *Public component:* areas not involved in patient care (e.g., waiting rooms, offices, corridors).

#### Public areas are cleaned with a detergent.

**2.** *Clinical component*: patient care areas, including operatory or treatment rooms, radiology, bathrooms and reprocessing areas.

Clinical areas are cleaned with a detergent and disinfected with a hospital disinfectant.

### **Sharps Regulation and Containers Standard**

- All sharps shall be Safety Engineered (*Needle Safety Regulation 474/07*)
- Containers should be at point of use and out of reach of children
- Tamper and puncture proof
- Must have proper lid
- Should be filled to <sup>3</sup>/<sub>4</sub> fill line only
- Prompt safe disposal arrangements when full

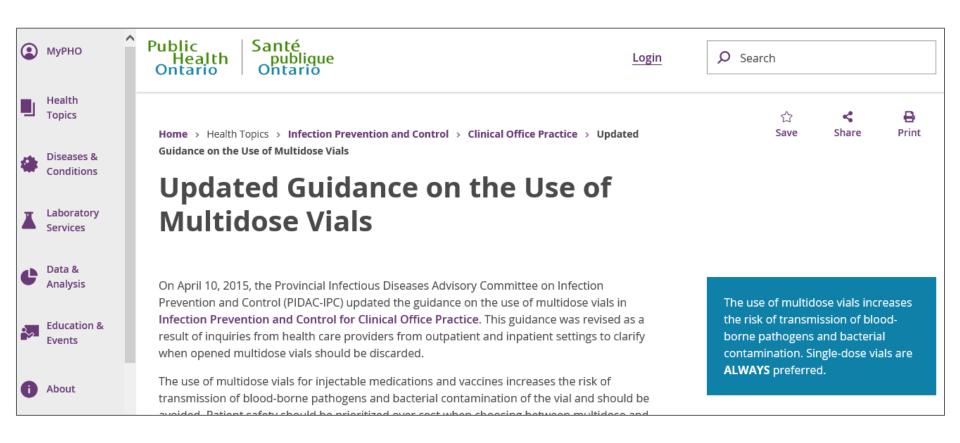
CAN/CSA-Z316.6-14 - Sharps injury protection - Requirements and test methods - Sharps containers

## **Safe Medication/Injection Practices**

- Prepare injections using aseptic technique in a clean area
- Disinfect the rubber septum on a medication vial with alcohol before piercing
- Single dose vials are preferred to multidose vials
- Always use a new sterile syringe and needle when entering a vial
- No pre-loading of syringes



#### **Safe Medication Practices**



## Medical Device Reprocessing (MDR) in Clinical Office Practice Settings

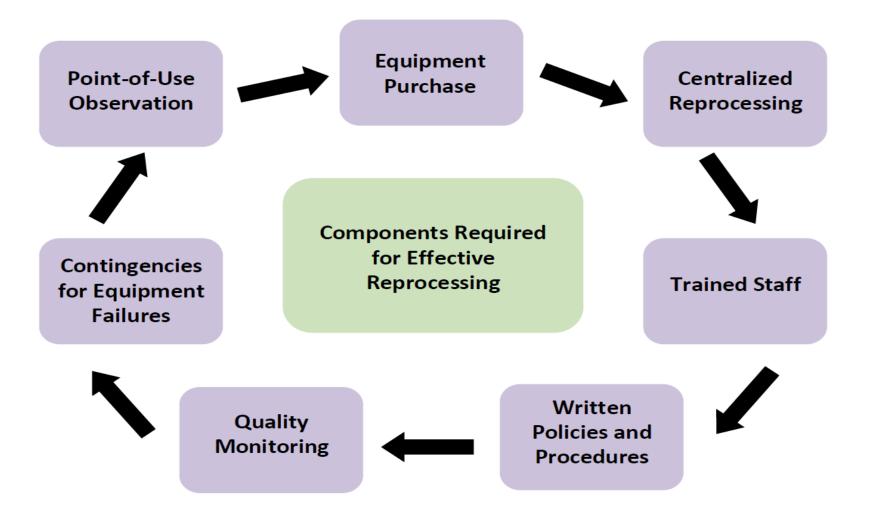


#### Reprocessing

"The steps performed to prepare used medical equipment/devices for use (e.g. cleaning, disinfection, sterilization)."

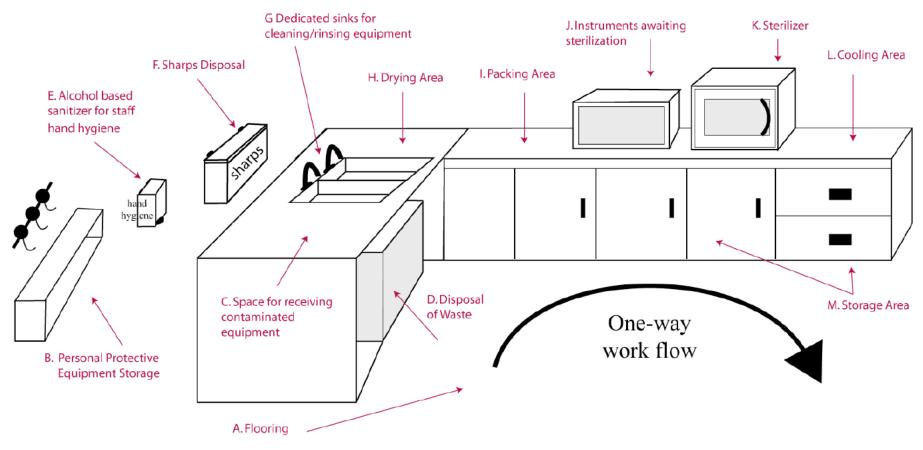
PIDAC Best Practices in Cleaning, Disinfection and Sterilization of Medical Equipment/Devices

#### **Components for Effective Reprocessing**



Best Practices for Cleaning, Disinfection and Sterilization in All Health Care Settings | May 2013

# **Control of the Environment: Reprocessing Area Design**





### Manufacturer's Instructions For Use (MIFUs)

- "the written directions provided by the manufacturer or distributor of a product that contain the necessary information for the safe and effective use of the product"
- Use for reprocessing as well as maintenance of any equipment
- If not available, contact supplier/vendor

#### **Sterilization Monitoring**

- If dynamic air removal-type (i.e., pre-vacuum) sterilizer is used, an air-detection PCD (e.g., Bowie-Dick test pack-Type 2) is used daily
- External chemical indicator/autoclave tape: placed on packages with each load
- Internal chemical indicator: placed inside each package for sterilization
- **Biological indicator** used once each day the sterilizer is in use
- Logs books/forms for documentation of sterilization parameters and autoclave maintenance



 Image: Stripe turns
 Image: Stripe turns<



External Chemical Indicator

Internal Chemical Indicator

**Biological Indicator** 

### **Releasing a Load or Package**

#### **Gold Standard-Best Practice**

- Wait for the BI results BI passes
- Review and verify physical parameters (time, temperature, pressure)
- Check the external CI did the colour change?
- Check the internal CI (min. Type 4) did the colour change?

### **Releasing a Load or Package**

Not able to wait for the BI

- PCD in load— with a Type 5 or 6 Cl <u>OR</u> Type 5 or 6 in every package
- Review and verify physical parameters (time, temperature, pressure)
- Check the external and internal CI

No printer/USB?

- Verify and record physical parameter visually during cycle
- Plan to get one and need Type 5 or 6 in every package

## **Record Keeping**

#### Sterilization log

Sterilizer Model:

#### Sterilizer Serial Number:

Load Details	Pouch Contents	Sterilizer Readings Met*	Operator Initials	Quality Indicators*	Operator Initials
		Temperature:		Chemical indicator	
Date:		Yes No		Change:	
Time:		Time:		🗌 Yes 📃 No	
Load #:		Yes No		Biological Indicator:	
		Pressure:		Pass Fail	
		🗌 Yes 📃 No			

#### **Records Retention**

Record data

- Paper or electronic record
  - Have a policy and procedure
  - Electronic have a back up
  - Thermal paper will deteriorate over time
  - No need to keep the Type 5 or 6 paper indicators

How long should records be kept?

- Start with your College
- Type of practice and patient population

#### **Education and Training Requirements**



# **Education, Training and Certification Requirements**

- IPAC Education annually-have a policy
- Reprocessing education and training of staff is required for all individuals in clinical settings
- Legislative requirements shall be met to remain in compliance with the Ontario Occupational Health and Safety Act

Ontario Agency for Health Protection and Promotion (Public Health Ontario), Cividino M, Moore D, Deeves M. Recommendations for education, training and certification for reprocessing in clinical office settings. Toronto, ON: Queen's Printer for Ontario; 2016.

### **Training Resource**



Recommendations for Education, Training and Certification for Reprocessing in Clinical Office Settings



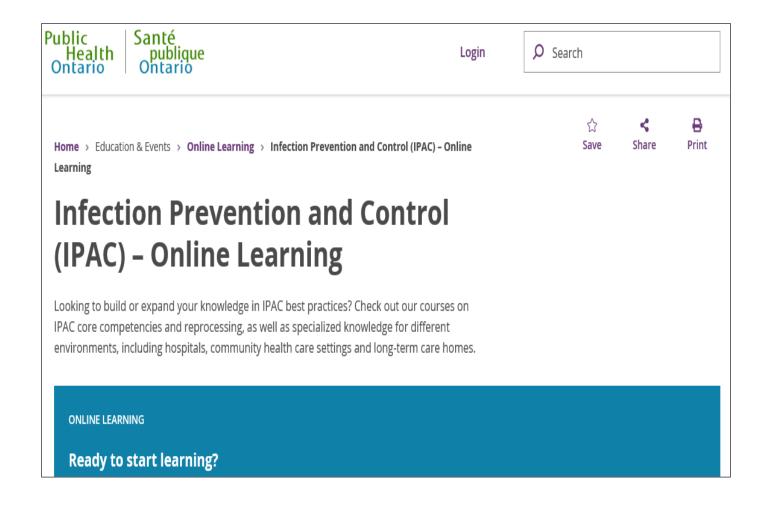
Education and training of staff is required for all individuals in clinical office settings to ensure both worker and patient safety.

The first step in choosing the appropriate education, training and certification requirements for staff is to determine what activities are being performed in the clinical office setting. Cleaning and disinfection are routinely required in all clinical office settings. Reprocessing of equipment using high level disinfection (HLD) or sterifization will be required in many settings. Staff responsible for cleaning and reprocessing should be trained to a level that is required for the volume and complexity of the equipment to be reprocessed.

Reusable medical equipment must be cleanable and be able to be disinfected or sterilized as appropriate for the equipment. This may not be cost-effective or timely for small establishments, and other options should be considered. The amount and frequency of equipment use should guide whether reprocessing is feasible or whether disposable equipment is more cost-effective.

https://www.publichealthontario.ca/-/media/documents/recommendations-certification-clinical-office.pdf?la=en

# **Education Resources**



### **Resources-Education**



Reprocessing in Community Health Care Settings Course



#### **IPAC Core Competencies Course**

# Reprocessing

#### **Reprocessing in Community Health Care settings**

Following best practices in cleaning, disinfection and sterilization of reusable medical equipment and devices helps prevent the transmission of infection to health care providers and clients and patients. This course provides you with:

- general concepts in reprocessing
- basic knowledge and skills for safely reprocessing reusable medical equipment/devices
- knowledge related to the importance of following best practices and the consequences of inadequate reprocessing
- best practices in reprocessing

**Target audience:** Health care providers who reprocess reusable medical equipment/devices in community settings such as clinics, clinical office practice settings, family health teams, community health care centres and other community health care settings.

Course duration: 2 to 4 hours

#### Modules: 9

**Certificate of completion:** Yes, after completion of test at the end of each module. Users must score 100% on each test to receive the certificate for that module.

Technical requirements: Speakers or headphones required for audio component.

## **Core Competencies Course**

#### Public | Santé Health | publique Ontario | Ontario

Login

#### Courses

#### **IPAC Core Competencies**

IPAC Core Competencies are basic skills and knowledge all Ontario health care workers need to have about IPAC. This course will help learners improve their knowledge about IPAC and help decrease the risk of transmission of infection in health care. This information can help protect workers, their patients, and co-workers from infections; regardless of their role, position, education, and experience.

Target audience: All health care workers
Course duration: 2 to 4 hours
Modules: 6
Certificate of completion: Yes, after completion of test at the end of each module. Users must score 100% on each test to receive the certificate for that module.
Technical requirements: Speakers or headphones required for audio component.
Resources: Resources for Trainers

## **Other Reprocessing Resources**

Public Santé Health publique Ontario Ontario PARTNERS FOR HEALTH PARTINA RED FORS LA DARTÉ

Sterilizer Model:

#### Sterilization Monitoring Log for Table-top Steam Sterilizers

The purpose of this document is to record process parameters for steam sterilization in community health care settings. This will assist with tracking of medical devices used on clients/patients/residents in the event of a recall or follow-up investigation.

Sterilizer Serial Number:

Load Details	Pouch Contents	Sterilizer Readings Met*	Operator Initials	Quality Indicators*	Operator Initials
Date: Time: Load #:		Temperature:           Yes         No           Time:         Yes         No           Yes         No           Pressure:         Yes         No		Chemical indicator Change: Yes No Biological Indicator: Pass Fail	
Date: Time: Load #:		Temperature:           Yes         No           Time:         Yes         No           Yes         No         No           Pressure:         Yes         No		Chemical indicator Change: Yes No Biological Indicator: Pass Fail	
Date: Time: Load #:		Temperature:           Yes         No           Time:         Yes         No           Yes         No           Pressure:         Yes         No		Chemical indicator Change: Yes No Biological Indicator: Pass Fail	
Date: Time: Losd #:		Temperature:           Yes         No           Time:         Yes         No           Pressure:         No         Pressure:		Chemical indicator Change: Ves No Biological Indicator: Pass Fail	

\* Any "no" or "fail" requires system failures procedure documentation and follow up.

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Print Name:		Signature:		Initials:	
Print Name:		Signature:		Initials:	
Print Name:		Signature:		Initials:	
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For more information, see the Best Pro of Medical Equipment/Devices or email ipac@pahop.ca. Public Santé Health publique Ontario Ontario PARTNERS FOR BEALTH PROTEMATELY FORM LA SERTÉ



Expiry Date:

This document is used to record process parameters for High-Level Disinfection in community health care settings and will assist with tracking of medical devices used on clients in the event of a recall or follow-up investigation. It is not intended for documentation of endoscope reprocessing.

HLD Name:	Lot #:	DIN: Date Decante	d;
Test Strips: Strip lot	number:	Date test st	rip
Do not use after:		(6 months after openin	E)

test strip bottle first opened:

opening)

Date	Time	Test Results	Device	Contact Time	Initials
		🗖 pass 🔲 fail*			
		🗖 pass 🔲 fail*			
		pass fail"			
		pass fail*			
		pass 🔲 fail*			
		pass 🔲 fail*			
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		pass 🔲 fail*			
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		pass 🚺 fail*			
		pass 🔲 fail"			
		pass 🔲 fail*			
		pass 🗖 fail*			

\* Requires system failures procedure documentation and follow up.

Print Name:	Signature:	Initials;
Print Name:	Signature;	Initials:
Print Name:	Signature:	Initials:
For more information, see the <u>Best Pract</u> of Medical Equipment/Devices or email j	ices for Cleaning, Disinfection and Sterilization, pac@oahpp.ca.	Di>Ontario

#### **Resources**

Public   Santé Health   publique Ontario   Ontario	Considerations for Purchasing a Table-top Steam Sterilizer
medical devices and when purchasing a table For more information, see the <u>Best Practices</u> <u>Equipment/Devices</u> or email <u>ipac@oahpp.ca</u>	
he following qualities and components are reco	ommended when purchasing a steam sterilizer:
Sterilizers must be capable of sterilizing t	he type of instruments that are used in each setting.
The supplier's claims should be validated	in the manufacturer's written material.
Sterilizers must be installed, used and co instructions.	ntinuously maintained in accordance with manufacturer's
Sterilization cycles must be monitored wiresults of monitoring must be documented	ith physical, biological and chemical monitors and the ed.

https://www.publichealthontario.ca/-/media/documents/purchasing-tabletop-sterilizer.pdf?la=en

# **Summary of resources**

- Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Infection prevention and control for clinical office practice. 1<sup>st</sup> revision. Toronto, ON: Queen's Printer for Ontario; 2015. Available from: <u>https://www.publichealthontario.ca/-/media/documents/bpclinical-office-practice.pdf?la=en</u>
- Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Best practices for cleaning, disinfection and sterilization of medical equipment/devices. 3<sup>rd</sup> ed. Toronto, ON: Queen's Printer for Ontario; 2013. Available from: <u>https://www.publichealthontario.ca/-/media/documents/bp-cleaning-disinfection-</u> sterilization-hcs.pdf?la=en
- Royal College of Dental Surgeons of Ontario. Standard of Practice: Infection prevention and control in the dental office. Toronto, ON: Royal College of Dental Surgeons of Ontario; 2018. Available from: <u>https://az184419.vo.msecnd.net/rcdso/pdf/standards-of-</u> practice/RCDSO Standard of Practice IPAC.pdf

# **Summary of resources**

- CSA Group. CSA Z314 2018: Canadian Medical Device Reprocessing. Toronto, ON: CSA Group; 2018.
- Centers for Disease Control and Prevention. Guidelines for infection control in dental health-care settings. Atlanta, GA: Centers for Disease Control and Prevention; 2003. Available from:

https://www.cdc.gov/oralhealth/infectioncontrol/pdf/recommendations-excerpt.pdf

- Centers for Disease Control and Prevention. The summary of infection prevention practices in dental settings: basic expectations for safe care. Atlanta, GA: Centers for Diseases Control and Prevention; 2016. Available from: https://www.cdc.gov/oralhealth/infectioncontrol/pdf/safe-care2.pdf
  - Accompanying checklist (Appendix A)

# **Summary of resources**

- IPAC Canada. Dental Checklist (Reprocessing and IPAC)
- Canadian Centre for Occupational Health. Emergency showers and eyewash stations [Internet]. Ottawa, ON: Government of Canada; 2018 [cited 2018 Jan 16]. Available from: <u>https://www.ccohs.ca/oshanswers/safety\_haz/emer\_showers.html</u>
- Public Services Health & Safety Association : <u>www.pshsa.ca</u>
- Ministry of Labour checklist: <u>http://www.forms.ssb.gov.on.ca/mbs/ssb/forms/ssbforms.nsf/FormDetail?OpenForm</u> <u>&ACT=RDR&TAB=PROFILE&SRCH=1&ENV=WWE&TIT=1960&NO=1960E</u>

# **Regional Support Team- East**

## • Regional IPAC Specialists

- Catherine Richard
- Donna Perron
- Annie Lord-Stephens

### Team Lead

• Sam MacFarlane

Please contact us at <u>ipaceast@oahpp.ca</u> for any questions not addressed during this presentation.

#### **For More Information About This Presentation, Contact:**

ipaceast@oahpp.ca

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Agency for Health Protection and Promotion

Agence de protection et de promotion de la santé