CAMDR

NEWSLETTER

Term: Spring 2018 | Issue 8

PRESIDENT'S CORNER

Our Conference theme this year is 'Navigating the Tides of Medical Device Reprocessing'! As we embark into the spring season, I encourage each of us involved in reprocessing to navigate the tides and continue to improve your practices to ensure they meet Canadian Standards for Medical Device Reprocessing (MDR). Let's invite our partners from the Operating Rooms (OR), Infection Prevention & Control (IPAC) and other customers who Central MDR provides support, to work with us and learn more about what we do. Invite them to your department meetings and to visit your areas where you perform the vital reprocessing support for their programs.

The Canadian Standards Association (CSA) just released the revised version of CSA Z314 series of MDR standards. I encourage you to request that your department purchase this standard for staff to review to ensure you are providing quality service to patients. The standard can be purchased at CAN/CSA-Z314-18 | Sterilization | ShopCSA.

CAMDR continues to meet their strategic goals by enhancing our website for members including providing education modules for MDR Technicians to ensure you your professional responsibilities. I urge each of you to consider your continuing education by writing the CSA Certification Exam. You may not always feel like you are recognized for your roles (although the tides are changing), but without your services, the organizations cannot function.

CAMDR's sustainability depends on our membership and our sponsors! We are excited that our membership keeps growing and very appreciative of the ongoing support from our many sponsors.

I hope you enjoy this spring edition of our newsletter and I encourage you to share it with colleagues within your organization. Please visit our website at www.camdr.ca for information on becoming a member and on our 2018 Biennial Conference in Halifax in October!

Merlee Steele-Rodway, RN
President


BECOME A CAMDR MEMBER TODAY!
VISIT WWW.CAMDR.CA
Your Annual Membership provides several benefits including:
Become an integral member of a national organization whose vision is dedicated to Medical Device Reprocessing
Access to Members Only section of the CAMDR website
Access to Online Education opportunities such as learning modules or webinars on the CAMDR website (2018)
Access to conference scholarships or education bursaries as they are available
Access to CAMDR Quarterly Newsletter
Exchange ideas with other MDR professionals through networking on CAMDR Members Only section on website
Receive reduced registration fees at conferences
Networking opportunities at CAMDR Conferences
Participate in MDR Surveys
Receive annual membership Guide
Receive email alerts on current MDR issues
Reduced rate for CAMDR 2018 Conference in Halifax
"Navigating The Tides of Medical Device Reprocessing"
http:/camdr.ca/conference/
CAMDR | 2018
Navigating the Tides of Medical Device Reprocessing

A CAVITATING EXPERIENCE (THE SHORT VERSION)

by Thomas Overbey
Marketing Director – Ultra Clean Systems

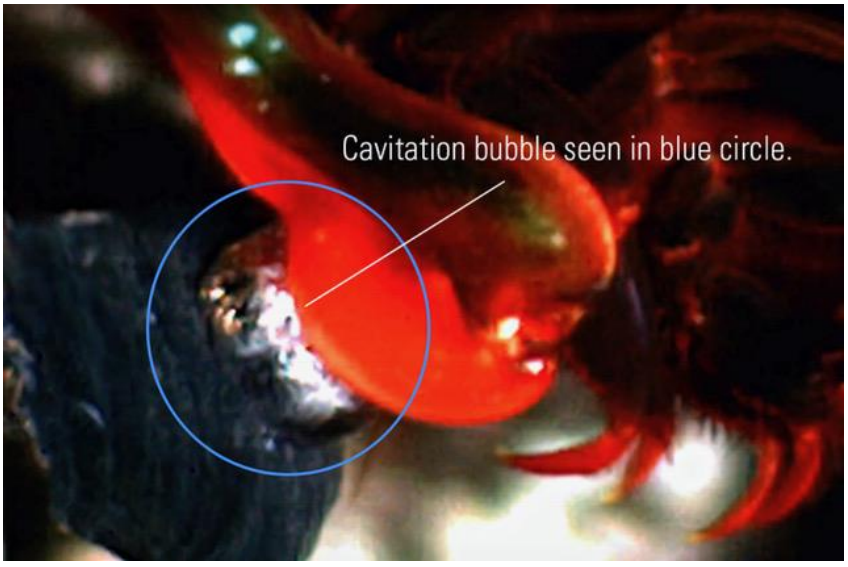
Ultrasonic cleaning systems are often misunderstood and do not always receive full credit for their role in cleaning instruments, in part due to the perception that they are just machines that produce a hissing sound with the instruments sitting in a bath of water. In fact, ultrasonic cavitation does great work in cleaning surgical instruments. Let's dive into what this cavitation process is and how it can be so important.

We listen to music or hear voice from speakers, which are considered a type of transducer. A transducer is a device that converts electrical energy into corresponding sound vibrations or other type of information. Similarly, the equivalent of a speaker in an ultrasonic cleaning system is referred to as a transducer.

Musical notes played on a bass guitar, for example, are perceived as lower pitches because they produce fewer vibrations of sound per second. These vibrations are merely recurring cycles of increasing and decreasing functions in air movement, which are simply changes in air pressure.

Conversely, notes played on a flute have a higher pitch because of the more rapid variations (vibrations) in air pressure.

In an ultrasonic system, these speakers (transducers) are attached to the underside or integrated inside the cleaning basin. What is different is that these transducers vibrate at extremely high frequencies, well above what the human ear is capable of detecting.

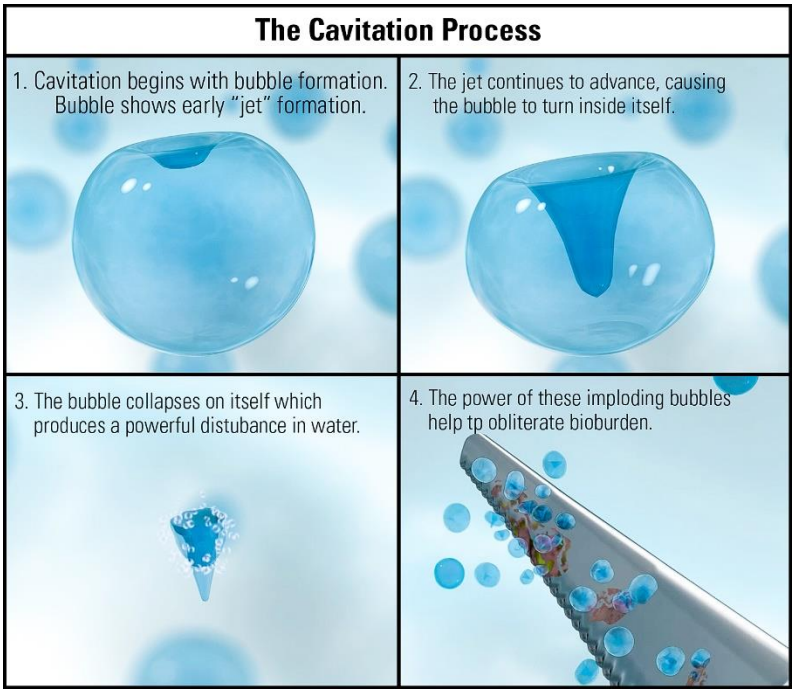


Cavitation is the energy process of cleaning instruments during ultrasonic cleaning. Ultrasonic cavitation begins with sound at a very high pitch or frequency. Breaking down the meaning of ultrasonic you have ultra, meaning extremely, and sonic meaning sound, where ultra refers to extremely high sound frequency. It is the very high frequency of sound vibrations in water that cavitation can occur.

The process of cavitation begins with these extremely rapid changes of pressure in water. To understand the significance of this high-frequency sound energy, let's consider how this phenomenon occurs in nature.

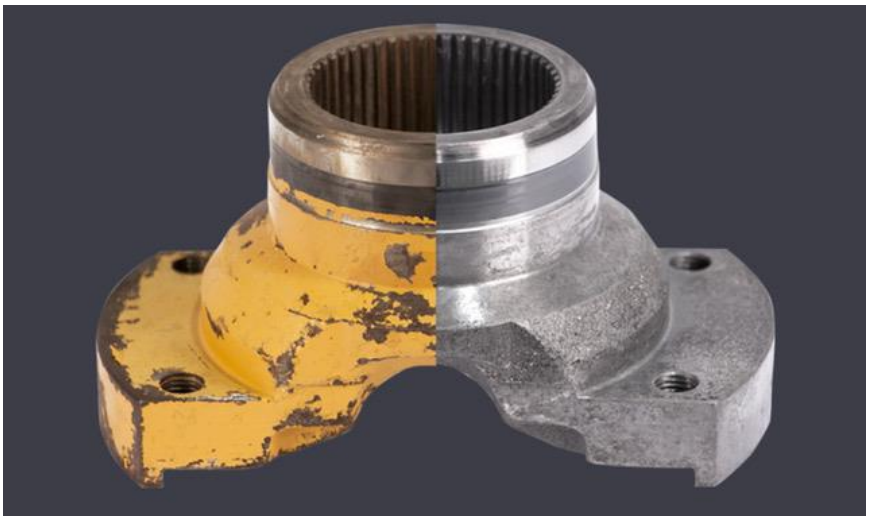
The mantis shrimp uses cavitation to attack its prey by striking a shell with a hammer-like motion. The hammer-like motion alone is not nearly enough to crack open a shell for its food. The shrimp's striking action is so rapid that it creates a high negative pressure, which creates a vapor-filled cavitation bubble. The cavitation bubble produces an instantaneous, powerful burst of energy at temperatures that can equal the sun!

These minute bubbles forming, imploding, and creating many massive disturbances in an ultrasonic basin from very high-frequency pulses are what provide the great cleaning power of these machines. (See The Cavitation Process graphic.)

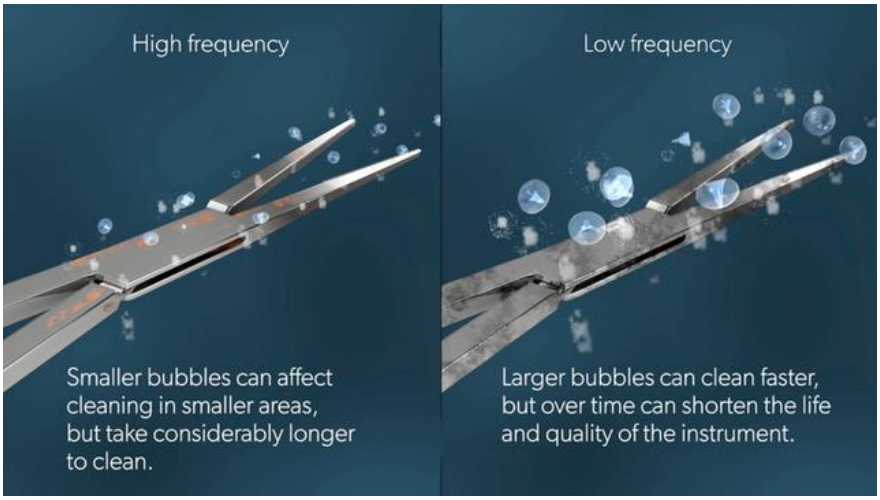


Let's look at a single bubble being formed in detail. When a gaseous bubble is formed through changes in pressure, the bubble will begin to cave-in on itself forming what is known as a jet. This looks like the bubble is actually piercing itself. As the jet ultimately comes to a point where the bubble can no longer sustain itself, the bubble fully implodes on itself, creating a brief but massive disturbance in the water. As a result, bioburden on a surgical instrument is impacted and can be dislodged from the instrument.

Cavitation has been used in industry for many decades. For example, old painted machine parts can be restored via cavitation by removing all the paint and corrosive oxidation. (See Industrial Ultrasonic Cleaning photo.)



The things to consider are how much energy is necessary and at what frequency do surgical instruments become clean without damage. (See the Low vs High Frequency illustration.)



Here is a sequence of images illustrating the differences in frequency, as well as the differences in power density and the resulting effect. The image on the left shows small cavitation bubbles, which occur with higher frequencies. The image on the right shows larger bubbles, which are produced with lower frequencies. Interestingly, smaller bubbles produced by higher frequencies may form inside smaller crevices but have a reduced effect on the amount of cleaning that occurs. As a result, a considerably longer cleaning time is required; time that sterile processing departments don't necessarily have. Conversely, at a lower frequency, larger cavitation bubbles are formed and have greater cleaning potential, but with repeated exposure, instruments can become dull or damaged beyond repair. (See the Low vs High Power Density illustration.)

What is the effect of differences in power density? We will use the same frequency so the bubbles will be the same size. Now we can compare the differences in power density.

The left image represents cavitation energy with lower power density, and the image on the right exhibits a higher power density. As a result, the bubbles are of equal size. Lower power density may produce a situation where cleaning may occur, but it will take considerably longer to clean instruments. Unfortunately, too much power, as seen in the example on the right, can cause instrument damage with repeated cleaning.

What this means to you is when selecting ultrasonic cleaning systems for your facility, it is best to consider the different wash parameters, power, and frequency the machines produce to render your instruments clean and safe for reuse.

New 2-Year Membership!

$80.00 CAD — 2-Year Membership is valid from now to December 31, 2019!

Prize Draw — Renew your membership **between now and June 30, 2018** and you will be entered into a draw for 1 (one) complimentary full conference registration* to the **2018 CAMDR Conference in Halifax, October 11-14, 2018**.
(*Travel expenses are not included.)

Recruit a Member!

By encouraging a colleague to join CAMDR you will be entered into a draw for 1 (one) complimentary full conference registration* to the **2018 CAMDR Conference in Halifax, October 11-14, 2018**.
(*Travel expenses are not included.)

Simply ask that they add your name to the referral field upon registering online for CAMDR membership.

Deadline: June 30, 2018.

Online Education Modules

Sign up as a member to obtain your user ID for access to the online education modules supported by:

3M Science. Applied to Life.™

A Review of Sterilization Methods and Recommended Practices for Healthcare Facilities Part 1
A Review of Sterilization Methods and Recommended Practices for Healthcare Facilities Part II: Terminal Low Temperature Sterilization

ASP THE Johnson & Johnson FAMILY OF CO

Operating the STERRAD®100S Sterilizer
Hydrogen Peroxide Safety
Verifying the Cleanliness of Medical Devices
Equipment Qualification (IQ, OQ, PQ): Demystification and Practical Application

Online Education Modules Continued

CANTEL MEDIC.

Medivators Advantage Plus Quiz
Medivators SCOPE BUDDY® Quiz

GETINGE GROUP

Principles of Decontamination
Traceability and T-DOC Instrument Intelligence
Contamination Monitoring vs Biofilm

nanosonics

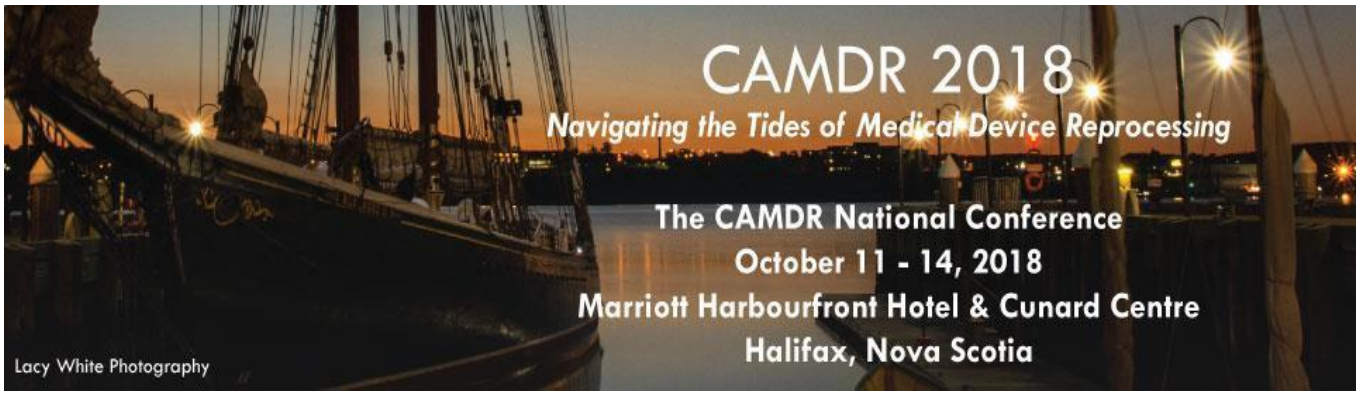
Ruth Carrico presentation – Survey On Surface Probe Reprocessing Practice In USA, duration 32 min approx.
Roy Boukidjian presentation – Challenges In Ultrasound (US) Probe Reprocessing, duration 20 min approx.
Challenges in Ultrasound Probe Reprocessing

STERIS

Welcome to the SPD
Cleaning Decontamination 101
Steam Sterilization 101
Endoscope Reprocessing 101

CAMDR Conference

Navigating the Tides of Medical Device Reprocessing
For more information please visit the “Conference” page of our **website**. Early bird **registration** is available until July 31, 2018!



View the 2018 Conference webpage for all the latest information.

Contact Us

Tell us what's going on...

Have an Event or Announcement you would like published on our website? Have some exciting news to share with us?

Contact us today!

camdr@eventsmgt.com

613-507-7603

A MESSAGE FROM MANITOBA

Spring Has Finally Sprung in Manitoba

End of fiscal year is upon us with a new and exciting year ahead!

Starting in April 2018, a new health organization (Shared Health Services) will come to Manitoba. Shared Health Services will help co-ordinate service delivery and planning across the province. Improving access to quality health care, including the ability to manage costs in a sustainable way in partnership with all five Regional Health Authorities in Manitoba, is their ultimate goal.

In other news, Gale Schultz, our CAMDR Executive Treasurer, is retiring her position as Regional Director of Medical Device Reprocessing for the Winnipeg Regional Health Authority (WRHA) in May 2018. Congratulations from all of us in Manitoba. We will miss you!

Sincerely,

Dalyce Fredette-Percy
Manitoba Provincial Advisor

A MESSAGE FROM ONTARIO

I am the Manager of the MDR at St. Michael's Hospital located in Toronto, Ontario and am looking forward to heading back to my home province of Nova Scotia this coming October for the CAMDR Conference.

As I have attended the last two conferences, I am looking forward to the keynote speakers as I find them to be humorous and witty. I also find that they pass along some great insights to our people and our job as health care professionals. The vendor exhibits are always packed with information with knowledgeable representatives, and always have some new technology/processes related to our field of medical device reprocessing to explore.

The LEAN process by Shelley Oldeham is one of the seminars that I hope to attend as I am a big believer in streamlining processes, supplies and medical devices to ensure a smooth and efficient running department. As I have been focusing on Quality Improvements in our MDR, I also want to hear the Performance Qualification for Products/Processes seminar which fits nicely into my interests. As I have recently completed the IAHSCSMM managerial exam, I look forward to hearing more about the CSA Certification Exam process and how to get staff to re-certify even while it is not yet mandatory in Ontario.

I look forward to meeting all of the Executive members, including the Provincial Advisors, from across Canada and taking in and sharing this great educational opportunity I have been given.

Sincerely,

Stephenie J. Naugler
Ontario Provincial Advisor

A MESSAGE FROM QUÉBEC

Québec Highlights for 2017-2018

In the province of Québec since April 2012, the *Center of Expertise in Medical Devices Reprocessing (CEMDR)* is working toward strengthening the development of provincial expertise to support Québec health facilities. Its interventions are aimed as much at solving technical problems related to MDR practices as they are at assessing the risks of infection in the event of accidents involving MDR. This is to support the transfer of knowledge aimed at improving and standardizing the domain.

Following the changes to the structure of the Health and Social Services Network (HSSM) in Québec, the CEMRD, with the collaboration of the Ministry of Health and Social Services (MHSS), set up a new committee of MDR users. This committee is made up of respondents from institutions working on MDR. Its main goals are to 1) help reduce incidents and accidents by developing a standardization of the practices within the institutions; 2) to propose strategies promoting a quality improvement by identifying the ways to achieve this; and 3) to elevate the efficiency of the individual and material resources, taking into account the legal and economic aspects.

In 2015, the CEMDR created a working committee to establish the Québec position regarding the alerts issued by the ECRI Institute, reporting the risk of infection with carbapenemase producing nitrobacteria (CPNs) associated with the use of duodenoscopes. After consultation, the CEMDR recommends screening duodenoscopes and all endoscopic devices (EDs) with a lifting mechanism on day 0. Then, screening for ED when a user has undergone endoscopic examination and they are known to have CPN or are suspected of doing so. In fact, the CEMRD has developed two protocols, one that equips professionals with sampling and the other with their culture. These protocols are the subject of a pilot project to assess their feasibility.

The 2017-2018 year was marked by the posting of four online courses. These aim at disseminating the information contained in the reference documents published by the CEMDR, such as the critical MDR, the flexible EDR, the transportation of the MDs for their reprocessing by an external organization, the audit process related to MDR, and the water quality used in the reprocessing to meet the needs of facility respondents.

The winter of 2018 was also marked by the publication of the “Institut national de santé public du Québec” monitoring report of adverse events in MDR. On the one hand, this report aims to monitor and analyze incidents and accidents (I/A) in MDR. On the other hand, it is a relevant tool to support the continuous improvement of RMD practices, by analyzing the systemic causes related to I/A and the possible options to avoid their recurrence.

In closing, the CEMDR invites you to consult all the publications and tools that are posted on the INSPQ website at www.inspq.qc.ca/cerdm.

Sincerely,

Josette Forest
Québec Provincial Advisor