



IN STEP WITH

Capintec

The Newsletter of Capintec, Inc.

SPRING 2009

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Urgent 'SOS' from Chambers and Wells Across the Nation!



Kathy Thomas, MHA, CNMT, FSNMTS

Your town, USA: Urgent 'SOS' messages have been sighted across the nation from dose calibrators and well counters. When interviewed, the dose calibrators and well counters noted that because of their long standing dependability - in most cases over decades, basic procedures that keep them in good working order are being overlooked. "We're the heart and soul of every nuclear medicine department," they exclaimed, "yet in most cases, we're taken for granted until something goes wrong! We have needs! All we're asking for is a little attention and a few simple key strokes each day to keep us in good working order!"

The daily test on dose calibrator and the test of calibration on well counters is equivalent to a 'mini aerobic workout' designed to keep the unit's

functionality in good working order.

Dose Calibrator Daily Test: 1-2 minutes

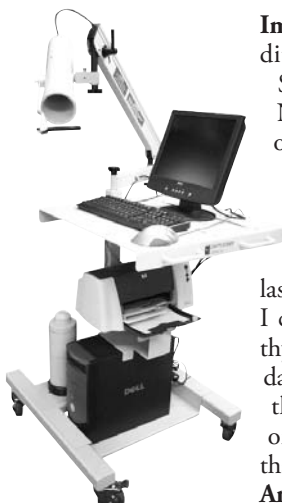
Auto Zero can be considered the warm-up phase for the dose calibrator. It assesses the offset drift from the last measurement to make sure that it remains within the tight +/-0.3 mV specifications.

The next step in the exercise program is to measure the background in the lab which will vary on a daily basis. This measurement is displayed and subtracted from subsequent measurements throughout the day. It is also an opportunity to identify possible contamination in the chamber or in surrounding areas.

Precise system voltage assures accurate measurements in the chamber. If the system voltage drifts, dose

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Technical Tips



Captus® 3000 Thyroid Uptake System

Important Note: To expedite your call to Technical Support, please have the Serial Number and Software Version of your unit available.

Captus® 3000:

Problem: We had a storm last night and lost power. When I came in today, one of the two thyroid patients I started yesterday had really weird numbers that had nothing to do with the original data. How can I fix that?

Answer: If a patient study is left open and a power failure occurs, the data for that patient will be

corrupted and cannot be repaired. If the patient data was printed, the remaining portion of the study can be performed on MCA and calculated manually (contact Technical Support for additional information on completing a thyroid uptake using the MCA software). If the initial data is not available, the procedure will have to be repeated. It is recommended that the thyroid uptake software (but not the full Captus 3000 program) be closed at the conclusion of every patient uptake to avoid this problem in the future.

Captus® 600:

Problem: I attempted to enter a new

patient for a thyroid uptake this morning but an error message told me the memory was full. I deleted all the patients from the database yet am still getting the same message. What can I do?

Answer: If you have deleted all patients from the database and 'memory full' continues to be displayed, call Capintec's Technical Support Service and we will help you delete the patients from the factory set-up side of the program. The procedure only takes about 1-2 minutes and will not affect any other data in your unit.

Problem: I tried counting a wipe sample in the well this afternoon and

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measurements can be affected so, it's important to allow the unit to examine its system voltage on a daily basis.

Peak exercise is achieved with the review of the nuclide data base which is a critical component to accurate dose calculations and measurements. Data check performs a very rapid assessment of the nuclide data base to confirm the accuracy of that information.

The cool-down phase of the mini-exercise program concludes with an assessment of constancy and accuracy. We rely on our dose calibrators to give us reproducible measurements on a daily basis. We can determine that accuracy by measuring a known source of activity to confirm that measurements remain within an expected range of 5%.

One additional exercise program that is recommended for the dose calibrator on a quarterly basis is Diagnostics. Dose calibrators function in a manner similar to the computers that we use on a daily basis. They have software memory, internal programs and communication links that need to be assessed on a periodic

basis. Diagnostics allows the unit to assess the integrity of all firmware to keep the unit operating at an optimal level.

Well Counter Test of Calibration: 1-2 minutes

The warm-up phase for the well counter begins with a measurement of background that is saved and subsequently subtracted from measurements made throughout the day. Of note, most labs have a higher background reading in the morning when unit doses are delivered. It's important to perform a repeat background anytime the room background has changed.

The Test of Calibration begins by assessing the specific calibration settings for the unit. This is accomplished by examining the ratio of counts in certain channels.

The next phase of the exercise program is to compare the measured activity of a known source to the calculated activity. The activity of the measured source should always be within +/-5% of the calculated activity.

The cool-down phase of the daily test determines the ratio of specific channels to confirm that the noise level of the unit is below the specified limit.

One additional exercise program required for the well counter on a weekly basis is auto cal or whenever energy calibration of a daily test fails. Auto cal performs a 'fine tune' on the internal high voltage to assure consistent ratios of counts between channels. Adding this procedure to the unit's weekly exercise program will enhance performance for many years.

Meeting the 'needs' of your dose calibrator and well counter

Although most of the analysis and system checks performed by dose calibrators and well counters are invisible to the user, the results of those procedures are what keep these units operating as accurately as possible, for many years. As the units will tell you, 'It's the little things that count!' By just allocating 3-5 minutes each day to address the 'needs' of these instruments, you can save your department time, money and anxiety.

Count on Capintec with our CRC®-25 Dose Calibrators

The new Generation of Quality Calibrators from Capintec

Enjoy the Features You Have Always Counted On with Our Calibrators, with a Host of New Ones!

- USB/PC Communications
- SD flash card software upgrade
- USB printer capability
- Chamber plug-and-play capability
- Optional remote that communicates over a high-speed serial interface and plugs into the chamber
- Both remote and chamber can be placed 100 feet from the readout unit
- Selection of Nuclide and Daily Test can be done with the remote

Count on Capintec with the new CRC®-25 Dose Calibrator line: Call a Capintec representative to find out how the CRC-25 series can benefit your department!



Count on Capintec with Our
CAP-Cell[®]
Isolator



The new Capintec CAP-Cell[®] Isolator is designed to provide a Class 100 clean air environment to meet the new and more stringent requirements of USP <797> for aseptic sterile compounding.

The system incorporates a sealed glove box with transfer chamber, 1/8 inch of lead shielding (optional 1/4 inch), on front wall, sides, and floor. Additional shielding on front face provides a full 1/4 inch body shield and lead glass view window. This is an ideal system for compounding and dispensing injectable Nuclear Medicine radiopharmaceuticals and eliminates the expensive requirement for placement in a Class 10,000 room.

To learn more about the CAP-Cell[®] Isolator and many other great Capintec products, contact a Capintec representative at 201-825-9500 or toll free at 800-631-3826.

Tips, From Page 1

got a 'memory full' message. What do I need to do?

Answer: Call Capintec's Technical Support Service. Similar to the 'memory full' for the patient data base, we can help you delete old wipe count data in factory set-up. Caution: Be sure to print your wipe count information (location, triggers, etc.) before calling Technical Support. When the wipe count data is deleted in factory set-up, all information associated with wipe counts is also deleted and must be re-entered prior to counting the next wipe sample.

If you have any questions that you'd like to see published, please contact Kathy Thomas at kthomas@capintec.com.



Captus[®] 600
 Thyroid Uptake
 System

Capintec Meeting Schedule

March 20-22	SNM SW Chapter Spring Meeting	Houston, TX
April 3-5	SNM Central Chapter Spring Meeting	Oak Brook, IL
April 17-19	SNM Mideastern Chapter Spring Meeting	Ocean City, MD
May 10-13	ICNC-9 *Passports are required for this meeting	Barcelona, Spain
June 13-17	SNM Annual Meeting *Passports are required for this meeting	Toronto, Canada
July 12-16	Health Physics Society Annual Meeting	Minneapolis, MN
Oct 1-4	ASNC 2009	Minneapolis, MN
Oct 10-14	EANM *Passports are required for this meeting	Barcelona, Spain
Nov 29-Dec 4	RSNA 2009	Chicago, IL

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Small Field...**Big View**



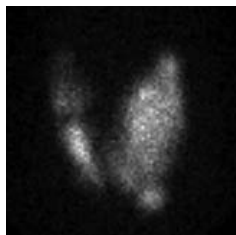
Capintec, the leader in energy measurement, is proud to introduce the CapIMAGE™ Gamma Camera

CapIMAGE is an all new small field of view gamma camera system ideal for imaging:

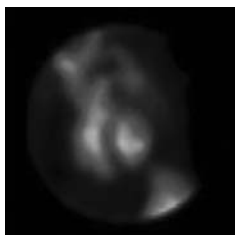
- I-123 and Tc-99 thyroid imaging
- Gated cardiac wall motion studies
- Small organ and body parts that can be accommodated with the 8.25 FOV (including pinhole and planar images) or 12.0 FOV at 5" from the surface of the diverging collimator

CapIMAGE provides:

- Small footprint
- Easy maneuverability
- Upright or supine imaging capabilities
- Highly versatile detector head for rapid positioning
- Rapid collimator exchange



LAO Pinhole Thyroid



Gated MUGA LAO



Right Shoulder

Functionality is the key to the CapIMAGE™. To learn more about this exciting new product contact a Capintec representative at 201-825-9500 or toll free at 800-631-3826.