

# The Q-Net™ Monthly

Volume 17, Numbers 11, 12

November-December 2011

## What's News

**H**appy Holidays. Featured in this newsletter's special end-of-the-year issue is Q-Net's popular annual quiz. Its **correct answers** are provided on p. 24S, which is included in this on-line version. This issue completes this newsletter's 17th continuous year of publication. All of this newsletter's previously published issues can be downloaded by visiting Q-Net's site: [www.MyEndoSite.com](http://www.MyEndoSite.com)

## Founder, Editor

**T**his newsletter/journal's articles are written by its founder, **Lawrence F. Muscarella, Ph.D.** Subscribe: [www.MyEndoSite.com](http://www.MyEndoSite.com)

## What is 'Q-Net'?

**Q-Net** is a technology assessment network of questions, answers, and perspectives that focuses on infection control in health care. Its newsletter is *The Q-Net™ Monthly*.

The main goal of **Q-Net** is to encourage the infection control, endoscopy, and operating room communities to improve patient care not only by asking good questions but also by demanding well referenced, evidence-based answers.

**Q-Net** addresses the needs of both the healthcare provider, whose goal is to provide the best care possible, and the patient, who deserves affordable quality health care.

## Q-Net's Annual Quiz

*A focus on infection-control lapses, risk assessments*

- This quiz focuses on each of the infection-control topics discussed in this newsletter during 2010. These topics include: infection control in ambulatory surgical centers (ASCs); published infections rates; aseptic technique; assessments of the risk of infection associated with several recently identified instrument-reprocessing lapses; and quality assurance.

- This quiz may be used for training or to provide continuing educational units (CEUs). It may also be used in conjunction with a medical facility's quality assurance and patient safety programs.

62,000 patients because it had high-level disinfected, not sterilized, colonoscopes. **(D)** In 2008 the VAMC in Augusta (GA) learned that it had been inadequately disinfecting flexible "ENT" endoscopes.

2. *A Veterans Administration medical center (VAMC) in each of the following U.S. states reported the improper reprocessing of a flexible endoscope or an associated accessory between 2008 and 2009 except:* **(A)** Miami (FL); **(B)** Santa Fe (NM); **(C)** Murfreesboro (TN); **(D)** Augusta (GA).

3. *The VAMC in Murfreesboro (TN)*  
(Continued on page 22)

**PART 1A: Growing Weeds?** (Refer to this newsletter's **January-February-March, 2010**, issue.)

1. *Which one of the following is false and was not reported in 2008 or 2009:* **(A)** In 2008 the VAMC in Murfreesboro (TN) noticed that it had been using the Olympus MAJ-855 auxiliary water tube improperly fitted with a two-way connector. **(B)** In 2009 the VAMC in Miami (FL) reported that it had not been reprocessing the MAJ-855 tube after each procedure. **(C)** In 2009 a VAMC notified

### QUIZ INSTRUCTIONS, ANSWER FORM:

**(A)** For each of the quiz's questions, please read every one of the provided choices *before* selecting the correct answer.

**(B)** A review of all of this newsletter's articles published in 2010 is recommended *prior* to taking this self-study quiz.

**(C)** Write the answer to each question on the form provided on p. 24S. This form, which includes this quiz's **correct answers**, is enclosed and *only* available in this newsletter issue's on-line version.

*concluded that each of the following factors contributed to the reprocessing breaches it identified in 2008 except:* (A) the manufacturer of the MAJ-855 irrigation tube; (B) inadequate training of the staff members responsible for reprocessing gastrointestinal endoscopes and their accessories; (C) human error; (D) an FDA-CDC health advisory.

4. *Which one of the following perspectives, conclusions, or concerns is not presented in this newsletter's triple issue:* (A) Confusion engendered by today's inconsistent standard of care may have contributed to the instrument-reprocessing breaches identified in 2008-2009 at, among other VAMCs, the one in Murfreesboro (TN). (B) The faulty reprocessing of ophthalmic instruments has been linked to toxic anterior segment syndrome (TASS). (C) Oversight by healthcare and accreditation organizations is important to ensure that the labeling claims of infection-control products and devices are not false or misleading. (D) It is surprising that instrument-reprocessing breaches are not reported more often. ●

**PART 1B: Growing Weeds?** (continued) (Refer to this newsletter's *January-February-March, 2010*, issue.)

5. *Which one of the following is provided in this newsletter's triple issue as an example of the current standard of care being, at times, conflicted and off-course:* (A) the countenanced use (through February, 2012) in operating-room settings of a federally-censured liquid-based "sterilizing" system that is without an approval or clearance; (B) inconsistent infection-control guidelines; (C) the advancement of double standards; (D) the endorsement by some operating-room guidelines of the clinical use of wet, processed surgical instruments, despite this practice being associated with an increased infection risk; (E) a statement by a North American health agency in 2010 that it has "no objection" to the continued sale and use of the federally-censured STERIS System 1, notwithstanding the FDA's conclusion in 2008 that this device is "adulterated and misbranded"; (F) all of the above.

6. *Which one of the following is false:* (A) The use of an unapproved "sterilizing" device could jeopardize aseptic technique and pose an increased risk of infection. (B) Contaminated rinse water has never been linked to an infection following gastrointestinal endoscopy. (C) Replacement (with an alternative device) of the federally-censured STERIS System

➔ The November 7 and 12, 2011, issues of the *Ottawa Citizen* newspaper discussed perspectives about tracing acquired infections to the improper reprocessing of gastrointestinal (GI) endoscopes.

**The newsletter's 2010 published topics:**

- ◆ **Growing Weeds? .....** Jan-Feb-Mar 2010
- ◆ **Lapses in Puerto Rico ....** Apr-May-Jun 2010
- ◆ **Infection Control in ASCs .....** July 2010
- ◆ **Q-Net's Annual Quiz .....** Aug-Sep 2010
- ◆ **Infection Rates .....** Oct-Nov-Dec 2010

1 in the U.S. could cost as much as \$500 million. (D) Prior to granting an extension, the FDA wrote that the STERIS System 1 could not be used after August 2, 2011. (E) The FDA granted an extension in 2011 that countenanced the continued use of the censured STERIS System 1 until February, 2, 2012.

7. *All of the following true statements were overlooked and not discussed in the article by Consumers Union about hospital infections (published in the March, 2010, issue of Consumer Reports) except:* (A) Checklists have been reported to reduce the risk of central line-associated bloodstream infections. (B) Published infection data are typically reported by hospitals themselves, without having been validated. (C) Infection rates reported by hospitals account for only a few specific types of infections. (D) Publicly reported infection rates may under-report their true incidence.

8. *During the inspections of 42 medical facilities within the Veterans Health Administration (VHA) in May, 2009, officials of the Veterans Affairs Office of Inspector General (VAOIG) did not focus on which one of the following:* (A) whether these medical facilities had on file "model specific" instructions for reprocessing flexible endoscopes; (B) whether these facilities had on file competency records demonstrating adequate training of staff; (C) whether these facilities used a low-temperature sterilization technology to reprocess bronchoscopes; (D) whether colonoscopes and "ENT" endoscopes were properly high-level disinfected. ●

**PART 2A: Lapses in Puerto Rico.** (Refer to the *April-May-June, 2010*, issue of this newsletter.)

1. *Regarding several instrument-reprocessing breaches confirmed in 2009 at a number of U.S. medical facilities in the Caribbean, including a Veterans Administration medical center (VAMC) in Puerto Rico, concern is expressed in this newsletter's triple issue about each of the following except:* (A) the Veterans Health Administration's (VHA) assessment

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that the risk of infection associated with these several breaches is “negligible”; (B) the VHA’s failure to notify affected patients of these potentially significant instrument-reprocessing breaches; (C) that the failure to notify patients of potentially significant instrument-reprocessing breaches may be interpreted to suggest perilously that the proper reprocessing of reusable instruments is superfluous; (D) the VHA’s decisions earlier in 2009 to notify more than 10,000 affected patients of several potentially significant instrument-reprocessing breaches confirmed at three other VAMCs.

**2. Which one of the following breaches was not confirmed in 2009 during inspections of these U.S. medical facilities treating veterans in the Caribbean?** (A) the failure to leak-test colonoscopes; (B) the reuse of needles and syringes to administer fentanyl and propofol; (C) the improper cleaning of flexible laryngoscopes; (D) improper high-level disinfection of transvaginal ultrasound transducers (or probes).

**3. Each of the following reprocessing measures is contraindicated except:** (A) disinfecting transvaginal ultrasound transducers by spraying them with a surface disinfectant; (B) cleaning flexible laryngoscopes using tap water, without a detergent; (C) high-level disinfection of pre-cleaned colonoscopes; (D) using adulterated and misbranded devices to “sterilize” heat-sensitive surgical instruments; (E) disinfecting flexible laryngoscopes by wiping their surfaces with a disposable sanitizing cloth.

**4. Which one of the following statements is false:** (A) The leak testing of colonoscopes is only required once a day. (B) Published studies suggest that the several infection-control breaches confirmed in 2009 during inspections of a number of U.S. medical facilities in the Caribbean could pose an increased risk of infection. (C) Flexible laryngoscopes are semi-critical devices requiring thorough reprocessing to prevent disease transmission. (D) Transvaginal ultrasound transducers may become contaminated with the human Papilloma virus (HPV), requiring their thorough reprocessing after each procedure to prevent disease transmission. ●

**PART 2B: Lapses in Puerto Rico.** (continued) (Refer to the April-May-June, 2010, issue of this newsletter.)

**5. Which one of the following reprocessing measures is contraindicated:** (A) Connecting the Olympus MAJ-855 tube to the colonoscope’s auxiliary water channel prior to beginning colonoscopy. (B) Reprocessing the MAJ-855 tube after each procedure, whether or not the auxiliary water system was used during the procedure. (C) Using the MAJ-855 tube fitted with a two-way connector. (D) Discarding the Olympus “OFF” tube (which connects the MAJ-855 tube to the water

**ANSWER FORM, CORRECT ANSWERS:** Remember to write your answers on the form provided on p. 24S. This form, which also features this quiz’s correct answers, is enclosed and available *only* in this on-line version of “The Q-Net Monthly.”

pump and water bottle) at the end of the day.

**6. Concerns are expressed in this newsletter’s triple issue about each of the following except:** (A) that the Veterans Health Administration’s (VHA) commitment to quality assurance appears lacking; (B) that the VHA may not always be complying with its own policies vis-à-vis patient notification of potentially adverse events; (C) that the VHA’s assessments of the risk of infection associated with confirmed infection-control breaches, including the faulty reprocessing of flexible laryngoscopes, may be inconsistent; (D) all of the above.

**7. The use of the Olympus MAJ-855 water tube fitted with a two-way connector instead of with a one-way valve could result in any of the following except:** (A) contamination of the duodenoscope’s elevator-wire channel; (B) contamination of the MAJ-855 tube due to the “back-flow” of potentially infectious debris from the patient’s colon; (C) patient-to-patient (horizontal) disease transmission; (D) malfunction of the MAJ-855 tube.

**8. Which one of the following about flexible laryngoscopes and transvaginal ultrasound transducers is true:** (A) their improper reprocessing is commonly linked to transmission of HIV; (B) intermediate-level disinfection of both types of instruments is recommended; (C) failure to properly reprocess either type of instrument poses an increased risk of infection; (D) neither type of instrument requires reprocessing, no matter whether it is covered with a sheath. ●

**PART 3: Lapses in Ambulatory Surgical Centers.** (Refer to the July, 2010, issue of this newsletter.)

**1. Which one of the following is false:** (A) The design of effective corrective actions requires that the lapse’s root causes not be determined or known. (B) In hazard analysis a “root cause” is a factor that was responsible for a lapse, failure, or error. (C) The design and employment of an ineffective corrective (or preventative) action may result in the lapse’s recurrence. (D) A root cause of the transmission of the hepatitis C virus via a contaminated multi-dose vial of propofol arguably could be the vial’s labeling, which provides for the administration of the anesthetic to multiple patients.

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2. *Which one of the following is not described in this newsletter's issue as a factor that might cause confusion and send "mixed signals" about the importance of infection control:* (A) questionable assessments that conclude potentially significant infection-control lapses pose "negligible" risks of infection; (B) monitoring the microbial quality of the water used to rinse flexible endoscopes; (C) double standards in infection control; (D) the countenanced use of adulterated and misbranded devices labeled to "sterilize" instruments.

3. *In the context of the importance of infection control and aseptic technique, which one of the following expressions is not discussed in this newsletter issue:* (A) "double standards"; (B) the "Butterfly effect"; (C) "mixed signals"; (D) "broken windows"; (E) a "double-edged sword." ●

**PART 4A: Published Infection Rates.** (Refer to the Oct-Nov-Dec, 2010, issue of this newsletter.)

1. *Discussed in this newsletter's triple issue, "CLABSI" refers to:* (A) a completely linear and acquired blood-stained infarct; (B) a central line-associated bloodstream infection; (C) a centrally located and avoidable bloodstream inclination; (D) a calamitous and blatant surgical-site infection.

2. *Which one of the following is false:* (A) A "central line" is a central venous catheter. (B) The prevention of bloodstream infections in intensive care units (ICUs) not only is crucial to reduce healthcare costs, but also may promote infection-control awareness in other healthcare settings, including in gastrointestinal endoscopy units. (C) Central lines may be inserted into either the femur or tibia. (D) Central lines are reportedly responsible for approximately 80,000 bloodstream infections in ICUs each year in the U.S.

3. *Which one of the following biases would not be expected to cause published infection rates to under-report the true incidence of infection:* (A) acoustic bias; (B) measurement bias; (C) financial bias; (D) publication bias. ●

**PART 4B: Published Infection Rates.** (continued) (Refer to the Oct-Nov-Dec, 2010, issue of this newsletter.)

4. *Each of the following is a change in the practice of central-line care that could introduce a confounding bias into an evaluation of an intervention's effectiveness except:* (A) use of a different type of central line; (B) use of more experienced clinicians to insert and maintain the central line; (C) validation of the infection data's accuracy and complete-

ness; (D) use of a different type of insertion-site antiseptic; (E) more frequent changing of the central-line's dressings.

5. *Infection rates reported by hospitals may be used for each of the following applications except:* (A) for consumers to compare the safety and quality of competing hospitals; (B) for lawmakers to censure and fine patients; (C) as a consideration for reimbursement by private and public health insurers; (D) none of the above.

6. *Complete the sentence correctly: Studies evaluating the effectiveness of an intervention for the prevention of central line-associated bloodstream infections [BLANK]:* (A) typically do not validate the infection data; (B) sometimes fail to confirm that staff complied with all of the intervention's prescribed practices; (C) are frequently prospective and neither randomized nor controlled; (D) all of the above.

7. *The discussion of central line-associated bloodstream infections in this newsletter's triple issue expresses a concern about each of the following except:* (A) published rates of these infections are too scientific; (B) published rates of these infections may under-report their true incidence; (C) the majority of the published rates of these infections have not been validated; (D) the under-reporting of these infections can cause the effectiveness of a studied intervention to be over-exaggerated. ● (Quiz is continued on p. 24S.) ➔ ➔ ➔

➔ This annual self-study quiz's answer form and correct answers are featured on p. 24S.

Thank you for your interest in this newsletter, which I founded. I have addressed each topic to the best of my ability. Respectfully, **Lawrence F. Muscarella, Ph.D.** Please direct all correspondence to:

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~ Answer Box and Key ~

**INSTRUCTIONS:** (1) After having reviewed all of the articles published in this newsletter in 2010, cover the inverted right-hand column, below, which provides the quiz's correct answers. (2) Write your answer to each question on the lines provided in the left-hand column, below. (3) Compare your answers to the correct ones.

**Part 1A.**

- Question 1: \_\_\_\_\_
- Question 2: \_\_\_\_\_
- Question 3: \_\_\_\_\_
- Question 4: \_\_\_\_\_

**Part 1B.**

- Question 5: \_\_\_\_\_
- Question 6: \_\_\_\_\_
- Question 7: \_\_\_\_\_
- Question 8: \_\_\_\_\_

**Part 2A.**

- Question 1: \_\_\_\_\_
- Question 2: \_\_\_\_\_
- Question 3: \_\_\_\_\_
- Question 4: \_\_\_\_\_

**Part 2B.**

- Question 5: \_\_\_\_\_
- Question 6: \_\_\_\_\_
- Question 7: \_\_\_\_\_
- Question 8: \_\_\_\_\_

**Part 3.**

- Question 1: \_\_\_\_\_
- Question 2: \_\_\_\_\_
- Question 3: \_\_\_\_\_

**Part 4A.**

- Question 1: \_\_\_\_\_
- Question 2: \_\_\_\_\_
- Question 3: \_\_\_\_\_

**Part 4B.**

- Question 4: \_\_\_\_\_
- Question 5: \_\_\_\_\_
- Question 6: \_\_\_\_\_
- Question 7: \_\_\_\_\_

**Part 5—Bonus.**

- Question 1: \_\_\_\_\_
- Question 2: \_\_\_\_\_

**Part 1A.**

- Answer 2: D
- Answer 1: B

**Part 5—Bonus.**

- Answer 7: A
- Answer 6: D
- Answer 5: B
- Answer 4: C

**Part 4B.**

- Answer 3: A
- Answer 2: C
- Answer 1: B

**Part 4A.**

- Answer 3: D
- Answer 2: B
- Answer 1: A

**Part 3.**

- Answer 8: C
- Answer 7: A
- Answer 6: D
- Answer 5: C

**Part 2B.**

- Answer 4: A
- Answer 3: C
- Answer 2: B
- Answer 1: D

**Part 2A.**

- Answer 8: C
- Answer 7: A
- Answer 6: D
- Answer 5: B
- Answer 4: F

**Part 1B.**

- Answer 4: B
- Answer 3: D
- Answer 2: B
- Answer 1: C

**Part 1A.**

- Answer 1: C

**Part 5—Bonus. Two Bonus Questions.** (Refer to Oct-Nov-Dec, 2010, issue of this newsletter.)

- Each of the following is a factor (discussed in this newsletter's triple issue) that can prevent surveillance methods from detecting central line-associated bloodstream infections, resulting in the published rates of these infections under-reporting their actual incidence, except: (A) misinterpretations of ambiguous definitions of a central line-associated bloodstream infection; (B) an independent audit of the infection data's validity; (C) culturing blood samples for only one or two types of recognized pathogens; (D) misclassification of primary bloodstream infections associated with central lines as "false positives."
- Complete the sentence correctly: *Validation of infection data is important to [BLANK]:* (A) ensure the accuracy and completeness of reported infection rates; (B) prevent the under-reporting of infection rates; (C) the sound and credible use of infection data to compare the safety and quality of hospitals; (D) all of the above. ■ *Happy Holidays.* ● **The End** [Quiz by: Lawrence F. Muscarella Ph.D.]

➔ Each of the articles and quizzes published in *The Q-Net Monthly* are written by this newsletter's founder and editor-in-chief **Lawrence F. Muscarella, Ph.D.** To subscribe to this free educational newsletter, or to download a previously published issue, visit: [www.MyEndoSite.com](http://www.MyEndoSite.com)

Thank you for your interest in this newsletter, which I founded. I have addressed each topic to the best of my ability. Respectfully, **Lawrence F. Muscarella, Ph.D.** Please direct all correspondence to:

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