MEETING NOTICE

Missouri Board of Pharmacy
PHARMACY TECHNICIAN WORKING GROUP

Missouri Council of School Administrators Conference Center
3550 Amazonas Drive
Jefferson City, Missouri 65109

January 27, 2017
9:00 a.m.

Except to the extent disclosure is otherwise required by law, the Missouri Board of Pharmacy’s Pharmacy Technician Working Group is authorized to close meetings, records and votes pursuant to Section 610.021(1).

The Working Group may go into closed session at any time during the meeting pursuant to § 610.021(1) for purposes of legal advice. If the meeting is closed, the appropriate section will be announced to the public with the motion and vote recorded in open session minutes.

If any member of the public wishes to attend the meeting, s/he should be present at the Missouri Council of School Administrators Conference Center, 3550 Amazonas Drive, Jefferson City, Missouri at 9:00 a.m. on January 27, 2017.

Notification of special needs as addressed by the Americans with Disabilities Act should be forwarded to the Missouri Board of Pharmacy, P O Box 625, 3605 Missouri Blvd., Jefferson City, Missouri 65102, or by calling (573) 751-0091 to ensure available accommodations. The text telephone for the hearing impaired is (800) 735-2966.

Please see the attached tentative agenda for this meeting.
TENTATIVE AGENDA

Missouri Board of Pharmacy
PHARMACY TECHNICIAN WORKING GROUP

January 27, 2017
9:00 a.m.

1. Welcome & Introductions
2. Review of Agenda
3. Approval of Minutes (9-30-2017)
4. Review of Pharmacy Technician Licensure Classifications/Working Group Suggestions on Authorized Technician Duties
5. Technician Qualification Requirements for Proposed Technician Classifications (Supporting Technicians, Registered Technicians and Advanced Technicians)
6. Review of Nuclear Pharmacy Technician Training Guidelines
7. Remote Technician Supervision/Expansion of Technician Roles in Missouri
8. Future Meeting Dates/Topics
9. Adjournment
The Missouri Pharmacy Technician Working Group met in open session during the times and dates stated in the following minutes. Each item in the minutes is listed in the order it was discussed.

**Board Members Present**
Christina Lindsay, President

**Working Group Members Present**
Edward Alviso  Bert McClary
Kristol Chism  Koby Prater
Steve Edwards  Diane McClaskey
Ron Fitzwater  Melody Savley
Fred Gattas  Tim Michaelree
Erica Hopkins  Miriam Mobley-Smith
Krista Kippenberger  David Overfelt
Timothy Koch  Susan Schneider
Susan Lanctot  Mike Stuart
Jessica Langley  Lindsay Wendorff
Pamela Marshall  David Wolfrath

**Staff Present**
Kimberly Grinston, Executive Director
Andi Miller, Inspector

**Others Present**
Valerie Greene, Pharmacist

Board President Christina Lindsay called the meeting to order at 9:06 a.m. Working Group and Advisory members introduced themselves and their respective organizations. President Lindsay summarized the pharmacy technician classifications suggested at the August 5, 2016, meeting. Specifically, President Lindsay reported the Working Group discussed proposing three classes of pharmacy technicians: (1) support staff/technicians, (2) registered technicians and (3) advanced practice technicians. Ms. Lindsay also noted the Working Group proposed establishing a minimum age of sixteen (16) for registered and advanced technicians.
Agenda Item # 1: A motion was made by Tim Koch and seconded by Susan Lanctot to approve the minutes of the August 5, 2016, meeting as presented. Motion passed by voice vote with no opposition. Attendees not present at the August 5, 2016, meeting abstained.

Agenda Item # 2 (Overview of ExCPT and PTCB): Jessica Langley, Executive Director of Education and Provider Markets for ExCPT, provided the following information regarding ExCPT’s pharmacy technician certification program:

- ExCPT is focused on patient safety and ensuring a qualified pharmacy technician workforce while supporting access to the profession.
- Over 500,000 pharmacy technician certifications have been issued ExCPT’s inception.
- The current exam cost is $115; online exam resources are available for $50 - $60. Over 500 testing locations are available nationwide. The current exam pass rate is approximately 80%.
- ExCPT has been nationally accredited by the National Commission for Certifying Agencies since 2008 and is now affiliated with Ascend Learning to assist with the examination development process.
- Applicants may qualify to take the certification examination via three avenues: (1) completion of an ASHP or state accredited education program, (2) military training, (3) completion of an employer based training program or (4) completion of 1,200 supervised training hours. ExCPT does not have a prescribed training curriculum for employer based training, however, Ms. Langley reported many of the training programs submitted have been ASHP accredited.
- Recertification is required every two (2) years. To re-certify, technicians must complete twenty (20) continuing education hours, including, 1 hour of pharmacy law. ACPE accredited continuing education is preferred but not required.

Miriam Mobley-Smith, PharmD., Director of Strategic Alliances for PTCB, provided the following information regarding PTCB’s technician certification program:

- PTCB’s mission is to ensure a competent pharmacy technician workforce. The organization is focused on improving patient care and enabling evolution of the technician role.
- PTCB was created by the industry in 1995 as a result of ASHP’s and APhA’s interest in establishing a national approach to pharmacy technician training/certification. PTCB is governed by five (5) entities: ASHP, APhA, NABP, the Michigan Pharmacy Association and the Illinois Pharmacy Association.
- Over 587,000 certifications have been issued by PTCB since its inception; 285,000 active certificate holders currently exist nationwide.
- To be eligible for examination, applicants must have a GED or High School diploma and complete a criminal history background check. In 2020, applicants will also be required to complete an ASHP/ACPE accredited training program. The enhanced 2020 training requirements were industry driven and adopted by PTCB after a nationwide discussion and review. Implementation of the 2020
date is still under discussion; PTCB wants to ensure a smooth implementation without workforce disruptions.

- Exams are administered in all 50 states, Guam and Puerto Rico. Currently, over 300 testing sites are available through arrangements with Pearson Vue. Over 56,000 examinations were administered in 2015. The current pass rate is 58%, however, pass rates have historically been as high as 81-82%.
- Recertification is required every two (2) years. To re-certify, technicians must complete twenty (20) continuing education hours, including, 1 hour of pharmacy law and (1) hour of patient safety education.

**Agenda Item # 3 & 4:** President Lindsay divided attendees into four groups to represent the major practice areas: (1) retail pharmacy, (2) chain retail pharmacy, (3) mail order and (4) hospital/specialty pharmacy. Attendees were asked to assign the technician tasks identified at the August 5, 2016 meeting to the appropriate pharmacy technician class. Individual group discussions were held as requested.

The full Working Group convened to discuss technician task designations; The majority consensus of assigned technician duties is reflected in Attachment B. Staff was asked to compile the Group’s recommendations for additional review/finalization at the next meeting.

**Agenda Item # 5 (Technician Regulation in the Future):** President Lindsay opened the floor for discussion on registration requirements for each technician classification in light of the duties allocated in Attachment B. The following discussion was held:

- President Lindsay asked if 1,200 hours of job training or completion of a certification examination would be appropriate as discussed in prior Working Group meetings. Tim Koch noted a 1,200 hour job training requirement would essentially mean that all technicians would eventually qualify as an advanced technician. Inspector Andi Miller stated it would be difficult for Board inspectors to differentiate between a registered technician and an advanced technician on inspection. Fred Gattas indicated other states require employers to have some type of assessment/competency examination. Tim Koch noted some states have also enacted grandfathering provisions for currently licensed technicians.
- The Working Group discussed a certification only requirement for Missouri technicians. Tim Koch commented this approach has not been positively received by Missouri legislators in the past. Susan Schneider indicated consumers would most likely want certification for technicians performing advanced duties; Fred Gattas noted mandatory certification will increase employer costs which will likely be passed on to the consumer. Valerie Greene commented the focus should be on patient care and raising the standard; Pamela Marshall noted pharmacy technicians may be the only allied healthcare professionals that are not required to complete some form of training. General consensus that a certification only requirement could adversely affect workforce availability.
- Working Group members expressed support for employer-based training programs that would be specific to the technician’s job duties. President Lindsay commented portability may be a concern and asked if a technician would be required to complete a new training program each time the technician changes work locations. Tim Koch stated it would be problematic for the industry if employer-based training programs were not transferable.

- Pamela Marshall suggested considering a dual option that would allow either certification or some form of training. Multiple Working Group members expressed support for a dual approach. Working Group consensus to discuss a dual certification and training option at the next meeting. Group members also asked to discuss remote technician supervision and expanded technician roles.

**Agenda Item # 6 (Future Meeting Dates/Times):**

Board staff will provide future meeting dates after the meeting. Attendees cautioned weather may affect meeting availability during the winter months.

President Lindsay adjourned the meeting by consensus at approximately 2:58 p.m.

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KIMBERLY A. GRINSTON
EXECUTIVE DIRECTOR

Date Approved:
SUPPORTING TECHNICIANS

1. Patient Scheduling
2. General customer service
3. Contacting patient when Rx not picked-up
4. Placing drug orders
5. Providing final drug product to patient
6. Rx delivery (internal & external)
7. Selling PSE products 1 & 2
8. General recordkeeping
9. Preparing pharmacy reports for pharmacy review
10. Monitoring technician registrations (licensing, discipline)
11. Managing technology systems, including, programming, routine database management and billing systems
12. General insurance billing/auditing
13. Insurance building auditing with access to the Rx system
14. Adding/updating third party insurance information
15. Managing/medication/patient assistance programs (a reg. technician duty if tech is doing more than processing paperwork)
16. Ordering medication

1 If they have access to the pharmacy.
REGISTERED TECHNICIANS

1. Monitoring Drug Shortages
2. Processing outdate returns
3. Checking/removing outdated/expired meds
4. Maintaining storage/dispensing devices
5. Retrieving medication for dispensing
6. Determining pick-up times
7. Bagging prescriptions
8. Making the offer to counsel
9. Insurance billing/auditing

10. Managing controlled substance systems***
11. Managing/medication/patient assistance programs (a support staff/tech duty if just processing paperwork)
12. Following up on missing meds
13. Following up on chart omissions
14. Establishing medication planners for patients
15. Inventory audits
16. Obtaining patient information (other than patient history)
17. Obtaining patient history
18. Prescription data entry & affixing prescription labels
19. Prescription data entry for high risk/ hazardous drugs
20. Counting/preparing prescriptions (new and refill)

21. Inventory
22. Filling first dose (rather than unit doses)
23. Unit dose repackaging
24. Obtaining refill authorization
25. Calling other pharmacies for patient information
26. Requesting/giving transfer information
27. Compounding (non-sterile)
28. Taking/recording verbal prescription information
29. Contacting prescriber for Rx clarification
30. Contacting prescriber for Rx changes
31. Training/Educating support technicians or other registered technicians
32. Obtaining prior authorization
33. Reviewing patient charts to identify medication allergies for RPh follow-up
34. Assisting with drug use evaluations (the Group asked to further discuss if this item needs clarification or should be an advanced technician duty)
35. Establishing patient medication planners
36. Preparing clinical monitoring information
ADVANCED TECHNICIANS

1. Dispensing final prescriptions from a remote location/Working under remote supervision
2. Chemo/nuclear/hazardous med preparation
3. Compounding (sterile) (the Working Group asked to further discuss if IV batches/preparations should be an advanced tech duty)
4. Training/educating an advanced technician
5. Remote video monitoring (in-patient)
6. Checking other tech pharmacy activities (tech-check-tech)
7. Blood pressure checks
8. Monitoring IV med rates
9. Medical records screening (for RPh intervention based on screening criteria)
10. Medical history assessment/Patient Screening
11. Point-of-Care Testing
12. Conducting or reviewing quality improvement/compliance programs
NUCLEAR PHARMACY TECHNICIAN TRAINING OBJECTIVES

Objective I

The nuclear pharmacy technician should demonstrate appropriate knowledge and understanding of the nuclear pharmacy practice site with emphasis on the technician duties and responsibilities, including standards of ethics governing pharmacy practice.

Competencies. The nuclear pharmacy technician should be able to:

1. Interpret the pharmacy's organizational chart in terms of general responsibilities and job status of personnel with whom the technician will have contact in carrying out assigned duties;

2. State the general employee performance standards of the pharmacy including reasons for initiation of disciplinary actions;

3. State all of the nuclear pharmacy technician's primary job responsibilities, the duties falling under each, and how these differ from the primary responsibility of the nuclear pharmacist;

4. State the pharmacy policies applicable to each of the primary job responsibilities and describe the procedures for each;

5. Define what is meant by a "decision requiring a pharmacist's professional judgement" and cite at least ten (10) examples;

6. Demonstrate the use of correct written skills by drafting a memorandum to the supervisor requesting a change in work schedule;

7. State the general requirements of any local, state, or federal laws that specifically affect any of the nuclear pharmacy technician's responsibilities;

8. Demonstrate appropriate working knowledge of any additional training or safety requirements mandated by the pharmacy or by any local, state, or federal agency by successful completion of any required program(s) (e.g. Notice and Instruction to Workers Frequenting a Restricted Area, Bloodborne Pathogens Instruction); and

9. Demonstrate appropriate working knowledge of the Nuclear Pharmacy Practice Standards as they relate to assisting nuclear pharmacists in providing comprehensive radiopharmaceutical services that include but are not limited to procurement, compounding, quality assurance, dispensing, distribution, and health and safety in the workplace.
**Training Guidelines.** Suggested topics include, but are not limited to:

1. Organization, functions, and responsibilities of the pharmacy;
2. Pharmacy policies and procedures, including employee handbook;
3. Orientation to nuclear pharmacy technician duties (job description);
4. Relationship of technicians to pharmacists and other staff;
5. Legal aspects of technician functions, such as:
   a. Accountability and liability
   b. Pharmacy regulations; and
6. Other aspects of licensing and regulatory compliance specific to the practice site, such as:
   a. Radiation Health regulations
   b. OSHA regulations

**Objective II**

The nuclear pharmacy technician should have a working knowledge of the radiopharmaceutical terms, abbreviations, and symbols commonly used in prescribing, compounding and dispensing radiopharmaceuticals.

**Competencies.** The technician should be able to:

1. Transcribe and generate computer labels without error for twenty-five (25) radiopharmaceutical orders selected at random from at least four (4) different institutions serviced by the radiopharmacy;
2. Demonstrate a working knowledge of the brand and generic names and abbreviations of commonly used radiopharmaceuticals. (e.g., Cardiolite®, sestamibi, MIBI ); and
3. Define terms specific to the measurement of radioactivity in both the traditional Curie System and International System of Units (SI) designations that include routine prefixes, decimals and scientific notation.

**Training Guidelines.** Suggested topics include, but are not limited to:

1. Radiopharmaceutical-medical terminology; and
2. Radiopharmaceutical abbreviations, symbols and radionuclide abbreviations.
Objective III

The nuclear pharmacy technician should demonstrate an ability to perform the mathematical calculations required for the usual dosage determinations and solution preparations in the preparation and dispensing of radiopharmaceuticals.

Competencies. The technician should be able to:

1. Perform conversion calculations between and within the SI and the traditional Curie based system of measurements of radioactivity.
2. Convert without error any given activity to pre and post calibration activity;
3. Perform the calculations necessary to prepare a standard cold kit from a generator elution;
4. Perform the calculations necessary to prepare a time-specific unit dose from a pre or post calibrated prepared radiopharmaceutical; and
5. Perform the calculations necessary to prepare weight-in-volume and volume-in-volume solutions.

Training Guidelines. Suggested topics include, but are not limited to:

1. Review of fractions, decimals, scientific notation, ratios, and percentages;
2. Review of weights and measures including the English System, Metric System, and Apothecary System;
3. Review of the decay equation;
4. Review of dosage calculations; and
5. Preparation of solutions.

Objective IV

The nuclear pharmacy technician should demonstrate the ability to perform the essential functions relating to drug purchasing and inventory control.

Competencies. The technician should be able to:

1. Prepare a written report of a physical inventory of pharmacy drugs and supplies using prepared forms and records;
2. Identify expired radiopharmaceuticals and drug products and appropriately delete the expired products from inventory;

3. Determine, from established reorder levels, which inventoried items should be ordered and in what quantity;

4. Demonstrate an ability to check in a drug shipment by using the packing list or invoice and purchase order, completing the receiving report, and adding the items to the inventory;

5. Demonstrate the ability to appropriately store and retrieve from storage at least ten (10) randomly designated items; and

6. Describe the procedure for lost shipments and for shipments received short or over quantity ordered.

**Training Guidelines.** Suggested topics include, but are not limited to:

1. Inventory and purchasing procedures and records;

2. Maintaining radioactive materials records; and

3. Use of computer terminals.

**Objective V**

The nuclear pharmacy technician should demonstrate a working knowledge of drug dosages by imaging procedure, routes of administration, dosage forms, and be able to distinguish therapeutic from diagnostic radiopharmaceutical utilization.

**Competencies.** The technician should be able to:

1. Distinguish unit-dose and multi-dose prescription amounts;

2. Demonstrate knowledge of the routes of administration for common radiopharmaceuticals;

3. Identify an appropriate radiopharmaceutical dose for a specified imaging procedure for common radiopharmaceuticals (e.g., Tc-99m dosage for thyroid scan, Meckel's diverticulum, red blood cell labeling, or testicular scan); and

4. Distinguish the dose appropriate for diagnostic or therapeutic use of a given radiopharmaceutical (e.g., I-131 for uptake and scan, whole body imaging, hyperthyroidism, or thyroid ablation).
**Training Guidelines.** Suggested topics include, but are not limited to:

1. Sources of radionuclides, radiopharmaceuticals and supplies;
2. Review of diagnostic procedures using radiopharmaceuticals;
3. Review of therapeutic procedures using radiopharmaceuticals;
4. Review radiopharmaceutical dosage forms (capsules, solutions, injectables, gases); and
5. Review of radiopharmaceutical dosages for specific procedures.

**Objective VI**

The nuclear pharmacy technician should have working knowledge of the procedures and operations relating to the reconstitution, packaging and labeling of radiopharmaceuticals.

**Competencies.** The technician should be able to:

1. Repackage and label twenty-five (25) unit doses from bulk prepared radiopharmaceuticals and correctly complete all necessary records;
2. Demonstrate, for each of five (5) technetium-99m labeled radiopharmaceuticals, the reconstitution and unit or multiple dose packaging in terms of:
   a. Proper selection and use of each ingredient;
   b. Correct selection of necessary equipment;
   c. Proper assembly, use and maintenance of the equipment;
   d. Accurate calculation and measurement of each ingredient;
   e. Proper completion of worksheet records and other required information;
   f. Correct procedure for mixing and preparing radiopharmaceutical;
   g. Correct procedure for quality control testing of the radiopharmaceutical;
   h. Proper selection and preparation of dosage containers and closures;
   i. Proper packaging technique for both unit and multi dose prescriptions and;
   j. Correct selection and preparation of labels;
3. Identify from the pharmacy reconstitution procedure those functions that must be performed by a pharmacist only; and
4. Demonstrate proper completion of all record-keeping requirements for each formulation.

**Training Guidelines.** Suggested topics include, but are not limited to:

1. Measurements of quantity (volume, weight, activity, and number);
2. Use, assembly, and maintenance of equipment and apparatus;
3. Control and recordkeeping procedures;
4. Packaging considerations;
5. Storage and inventory control;
6. Lot numbers and expiration dates and times;
7. Types of drug containers and packages; and
8. Labeling of drug containers and packages.

Objective VII

The nuclear pharmacy technician should have a working knowledge of the procedures and techniques relating to aseptic compounding of radiopharmaceuticals and drug products and the associated parenteral admixture operations.

Competencies. The technician should be able to:

1. Define or describe:
   a. Microbial growth and transmission;
   b. Origin, pharmacologic effect and prevention of pyrogens;
   c. Sterility;
   d. Heat sterilization; and
   e. "Cold" sterilization;

2. List five (5) different possibilities for contamination of an injectable solution during its preparation and for each possibility a precaution that would prevent the contamination;

3. Describe the occasions when hand washing is required and demonstrate the proper technique.

4. Identify the major components of a laminar airflow hood and state their functions;

5. Demonstrate the proper technique for cleaning and maintaining a laminar airflow hood, including appropriate record keeping;

6. Demonstrate the proper selection of and technique for using a syringe and needle for aseptic withdrawal of the contents of:
   a. A rubber-capped vial; and
   b. A glass ampule;
7. Demonstrate the efficacy of employed aseptic techniques by successfully completing a sterile media fill validation test;

8. Demonstrate the proper technique for aseptic reconstitution of a cold kit;

9. Demonstrate the proper technique for visual inspection of radioactive parenteral solutions; and

10. Demonstrate the correct technique and procedure for preparing at least three (3) technetium-99m radiopharmaceuticals, including the proper preparation of the label and completion of appropriate records.

Training Guidelines. Suggested topics include, but are not limited to:

1. Parenteral routes of administration common to nuclear pharmacy (rationale, precautions and problems);

2. Equipment and systems used with radiopharmaceuticals for parenteral administration (needles and syringes, administration sets, containers, filters, pumps, syringe shields and other shielding devices);

3. Aseptic compounding techniques (specific to the system in use and including the prefiling of syringes);

4. Labeling and recordkeeping; and

5. Quality control (particulate matter inspections and monitoring of contamination).

Objective VIII

The nuclear pharmacy technician should demonstrate the ability to perform the usual technician functions associated with a specific nuclear pharmacy.

Competencies. The technician should be able to:

1. Demonstrate the proper technique for Molybdenum-99 / Technetium-99m generator elution, including appropriate record keeping;

2. Describe the specific dispensing and record keeping procedures that apply to the dispensing of:
   a. Diagnostic radiopharmaceuticals;
   b. Therapeutic radiopharmaceuticals;
   c. Non-radioactive drugs; and
d. Investigational radiopharmaceuticals;

3. List for each of thirty (30) common radiopharmaceuticals the;
   a. Trade name(s);
   b. Generic name;
   c. Usual dose associated with a given procedure; and
   d. Manufacturer(s), calibration date/time, and expiration time;

4. Describe for at least ten (10) technetium-99m radiopharmaceuticals, as appropriate:
   a. Quality control testing for radiochemical purity;
   b. Quality control testing for radionuclidic purity;
   c. Quality control testing for chemical purity; and
   d. Procedural errors that result in substandard radiopharmaceuticals;

5. Describe the following as they relate to medication errors:
   a. Potential sources of medication errors;
   b. Techniques that assist the technician in avoiding and preventing errors;
   c. Proper procedures for reporting potential errors to the pharmacist; and
   d. Time-critical component of identifying, reporting and correcting potential medication errors.

Training Guidelines. Suggested topics include, but are not limited to:

1. Setting up doses for patients;
2. Checking doses;
3. Equipment used to perform quality control testing;
4. Quality control techniques;
5. Review of prescription orders; and
6. Manufacturer package inserts.

Objective IX

The nuclear pharmacy technician should demonstrate the ability to perform the appropriate handling techniques and record keeping functions associated with the reconstitution and dispensing of radiopharmaceuticals.

Competencies. The technician should be able to:
1. Demonstrate appropriate radiation safety techniques employed in handling radioactive materials;

2. Carry out the following functions for ten (10) randomly selected radiopharmaceuticals:
   a. Correctly prepare, using a typewriter or computer, the label;
   b. Select the proper drugs and desired lots from dispensing stock;
   c. Accurately measure the product and place in the proper container;
   d. Properly label the dose container and exterior shielding; and
   e. Complete the necessary records and documents;

3. Correctly determine the availability of radiopharmaceuticals not in dispensing stock, including:
   a. Manufacturer;
   b. Calibration and expiration time;
   c. Soonest availability; and
   d. Appropriate order quantity; and

4. Designate from of a list of ten (10) steps involved in radiopharmaceutical dispensing those functions that only a pharmacist may carry out.

Training Guidelines. Suggested topics include, but are not limited to:

1. Preparing prescription labels;

2. Manufacturer package inserts and information sheets; and

3. Measuring and assaying radioactive materials, radiopharmaceuticals, and other chemical and drug products.

Objective X

The nuclear pharmacy technician should demonstrate the appropriate handling techniques and record keeping functions associated with quality control testing of radiopharmaceuticals.

Competencies. The technician should be able to:

1. Carry out the following functions for ten (10) randomly selected radiopharmaceuticals:
   a. Select the appropriate solvents and media for the radiopharmaceutical chromatographic analysis;
   b. Accurately perform the appropriate physical test;
   c. Describe the species identified with the appropriate procedure; and
d. Complete the necessary records and documents;

3. Correctly carry out the following functions for any generator elution:
   a. Select the equipment necessary to perform radionuclidic purity;
   b. Accurately perform the purity test according to the equipment manufacturer's specification;
   c. Determine the expiration time of the generator elution; and
   d. Complete the necessary records and documentation; and

4. Correctly perform sterility testing of both radioactive and non-radioactive products according to pharmacy protocols.

Training Guidelines. Suggested topics include, but are not limited to:

1. Performing quality control testing;
2. Review of radiochemical and radionuclidic purity testing;
3. Review of sterility testing of radiopharmaceuticals; and