

# NMTCB Task List

## Group I: Radiation Safety

1. Post appropriate signs in designated areas to comply with NRC regulations.
2. Prepare and package radioactive materials for transportation.
3. Use personal radiation monitoring devices.
4. Review monthly personnel exposure records.
5. Take appropriate measures to reduce radiation exposure.
6. Notify the appropriate authority of excessive radiation exposure.
7. Notify the appropriate authority of Medical Events.
8. Utilize proper methods for the use and storage of radioactive materials.
9. Instruct the patient, family and staff in radiation safety precautions after the administration of therapeutic radiopharmaceuticals.
10. Provide instruction on proper radiation emergency procedures.
11. Perform wipe tests and area radiation surveys.
12. Prepare, survey and clean radiotherapy isolation room.
13. Survey, inspect and inventory incoming radioactive materials.
14. Monitor and dispose of radioactive material.
15. Use proper procedures for managing a radioactive spill.

## Group II: Instrumentation

16. Perform and evaluate quality control on a well counter or probe.
17. Calibrate a scintillation camera.
18. Perform and evaluate field uniformity of a scintillation camera.
19. Perform and evaluate detector linearity and spatial resolution of a scintillation camera.
20. Assess performance of image recording equipment.
21. Determine operational status of survey meter.
22. Perform and evaluate dose calibrator constancy, accuracy, linearity and geometry tests.
23. Perform and evaluate quality control procedures for CT imaging system.
24. Perform and evaluate quality control procedures for SPECT imaging system.
25. Perform and evaluate quality control procedures for PET imaging system.

## Group III: Clinical Procedures

26. Maintain and operate auxiliary equipment (as described in equipment/procedures list).
27. Schedule patient studies, ensuring appropriate sequence of multiple procedures and interact with staff regarding special orders.
28. Receive patient and provide proper nursing care during medical imaging procedures.
29. Communicate effectively with patient, family and staff.
30. Provide safe and sanitary conditions.
31. Recognize and respond to emergency conditions.
32. Receive patient, verify patient identification and physician orders for study and follow up on inappropriate orders.
33. Obtain pertinent patient history and check procedural contradictions.
34. Prepare patient for procedure.
35. Select and administer the appropriate radiopharmaceutical by the proper route.
36. Prepare proper instrument, computer and auxiliary equipment and acquire imaging procedures as indicated by protocol.
37. Evaluate image appearance and perform any additional views as required.
38. Process and evaluate computer generated data.
39. Prepare and perform cardiac monitoring and/or stress testing.
40. Obtain samples and/or data for non-imaging studies.
41. Calculate and evaluate results of non-imaging studies.

**Group IV: Radiopharmacy**

42. Prepare/administer interventional pharmacologic agent.
43. Elute radionuclide generator; perform and evaluate quality control tests.
44. Review the daily work schedule to plan radiopharmaceutical needs.
45. Prepare radiopharmaceutical kits, perform quality control and evaluate results.
46. Prepare and dispense diagnostic radiopharmaceuticals.
47. Prepare and dispense therapeutic radiopharmaceuticals.
48. Label blood components with a radiopharmaceutical according to protocol for procedure.

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