

American Association of Physicist in Medicine

Annual Meeting – July 30, 3008
Houston, Texas

Practical Medical Physics
Radioactive Materials Transportation
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1. Transport Index is defined as:
 - A. The maximum radiation level in units of mrem/hr and rounded up to the next tenth mrem/hr measured at one meter from the surface of a radioactive material package.
 - B. The maximum radiation level in units of mrem/hr and rounded up to the next tenth mrem/hr measured at the surface of a radioactive material package.
 - C. The average radiation level in units of mrem/hr and rounded up to the next tenth mrem/hr measured at one meter from the surface of a radioactive material package.
 - D. The maximum radiation level in units of mrem/hr and rounded up to the next tenth mrem/hr measured at two meters from the surface of a radioactive material package.
2. A Curie, millicurie, microcurie, Becquerel, gigabecquerel or terabecquerel represents a measure of the:
 - A. Quantity of radioactive material in lieu of a weight or volume measurement.
 - B. Weight of the package containing the radioactive material.
 - C. Sum of the length, width and height of the package containing the radioactive material.
 - D. Total number of packages transported on a vehicle.
3. Radioactive placards are not required on the vehicle when transporting one or more Radioactive Yellow-III labeled packages.
 - A. True
 - B. False
4. An radionuclide which has a specific activity below its listed "activity concentration limit for exempt material" is required to be shipped as a hazardous material or dangerous goods commodity.
 - A. True
 - B. False

5. A package containing 30 Ci of Iridium-192 as special form material is properly classified as:
A. Limited Quantity
B. Type A Quantity
C. Type B Quantity
D. Low Specific Activity
E. Highway Route Controlled Quantity
6. A total activity of 5 mCi of Iodine-125 in liquid form may be shipped as a Radioactive Material, Excepted Package - Limited Quantity of Material, provided that the surface radiation level on the package does not exceed 0.5 mrem/hr.
A. True
B. False
7. When a radioactive material package is required to be labeled with a Radioactive White I, Radioactive Yellow II or Radioactive Yellow III label, then two such labels are required on opposite sides of the package.
A. True
B. False
8. A package which has a maximum 75 mrem/hr surface reading and the TI = 0.9 is properly categorized and labeled as:
A. Radioactive White I
B. Radioactive Yellow II
C. Radioactive Yellow III
D. Cargo-Only Aircraft
E. Highway Route Controlled Quantity
9. A 5 Ci Molybdenum-99 generator is being shipped to Gotham City General Hospital for medical purposes. The package has a maximum 60 mrem/hr surface reading and the TI = 3.5. This package can be transported on a passenger carrying aircraft.
A. True
B. False
10. The following contains all the information for a correct descriptive entry on a declaration or shipping paper:

Radioactive material, Type A Package, 7, UN2915, Mo-99, solid salt,
1 Type A package x 111 GBq,
Radioactive Yellow II, TI 0.8, Dimensions 38 cm x 38 cm x 46 cm.

A. True
B. False