

2008 Nuclear Medicine Diagnostic Reference Activities and Most Common Activities for the Standard 70 – 80 kg Adult.

| Procedure Name | Nuclide | Chemical Form | Route of Administration | Number of Responses | Most Common Activity (MBq) | Adult Reference Activity (MBq) |
|-----------------------------|---------|--------------------------|-------------------------|---------------------|----------------------------|--------------------------------|
| Imaging Procedures | | | | | | |
| Arterial infusion | Tc-99m | MAA | i.arterial | 10 | 150 | 190 |
| Bone marrow | Tc-99m | colloid, nanocolloid | iv | 31 | 200 | 550 |
| Bone scan | Tc-99m | MDP, HDP | iv | 76 | 800 | 900 |
| Brain | Tc-99m | DTPA | iv | 7 | 800 | 900 |
| Brain | Tc-99m | HMPAO, ECD | iv | 49 | 800 | 900 |
| Brain | F-18 | FDG | iv | 7 | 370 | 385 |
| Cardiac GHPS | Tc-99m | red cells | iv | 74 | 1000 | 1000 |
| Cardiac first pass | Tc-99m | red cells, pertechnetate | iv | 24 | 900 | 930 |
| Cardiac L/R shunt | Tc-99m | pertechnetate | iv bolus | 20 | 900 | 900 |
| Cardiac R/L shunt | Tc-99m | MAA | iv | 20 | 100 | 185 |
| CSF leak | Tc-99m | DTPA | intrathecal | 27 | 370 | 370 |
| CSF leak | In-111 | DTPA | intrathecal | 12 | 15 | 38 |
| CSF shunt patency | Tc-99m | DTPA, pertechnetate | cisternal | 26 | 40 | 80 |
| GIT blood loss | Tc-99m | red cells | iv | 60 | 1000 | 1000 |
| GIT colonic transit | Ga-67 | citrate | oral | 62 | 6 | 20 |
| GIT gastric emptying | Tc-99m | colloid, DTPA | oral | 72 | 40 | 40 |
| GIT gastric emptying | Ga-67 | citrate | oral | 21 | 8 | 20 |
| GIT oesoph transit | Tc-99m | colloid | oral | 53 | 40 | 40 |
| GIT oesoph reflux | Tc-99m | colloid | oral | 31 | 40 | 40 |
| GIT small bowel transit | Tc-99m | colloid | oral | 23 | 40 | 40 |
| Hepatobiliary | Tc-99m | HIDA, DISIDA, DIDA | iv | 75 | 200 | 200 |
| Infection | Tc-99m | wbc-colloid, wbc-HMPAO | iv | 57 | 500 | 800 |
| Infection (whole body) | Ga-67 | citrate | iv | 68 | 200 | 250 |
| Infection (local) | Ga-67 | citrate | iv | 14 | 200 | 200 |
| Lacrimal drainage | Tc-99m | pertechnetate | eye drops | 6 | 13 per eye | 18 per eye |
| Le Vein shunt | Tc-99m | colloid | intra peritoneal | 16 | 185 | 200 |
| Liver blood flow | Tc-99m | red cells | iv | 61 | 1000 | 1000 |
| Liver/spleen | Tc-99m | colloid | iv | 58 | 200 | 200 |
| Liver transplant | Tc-99m | HIDA, DISIDA | iv | 11 | 200 | 200 |
| Lung perfusion | Tc-99m | MAA | iv | 72 | 200 | 220 |
| Lung ventilation | Tc-99m | Technegas, DTPA | inhaled | 67 | NA | NA |
| Lymphoscint – melanoma | Tc-99m | nanocolloid | intradermal | 56 | 20 per inj. site | 30 per inj. site |
| Lymphoscint – breast Ca | Tc-99m | nanocolloid | perilesional | 56 | 20 per inj. site | 40 per inj. site |
| Meckel's diverticulum | Tc-99m | pertechnetate | iv | 62 | 400 | 400 |
| Myocardial hot spot | Tc-99m | PYP | iv | 21 | 800 | 800 |
| Myocardial perfusion – rest | Tl-201 | chloride | iv | 28 | 120 | 120 |

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| Myocardial perfusion – stress | Tl-201 | chloride | iv | 27 | 120 | 120 |
| Myocardial perfusion – reinjection | Tl-201 | chloride | iv | 28 | 40 | 40 |
| Myocardial perfusion – 2 day stress/rest (stress) | Tc-99m | MIBI, tetrofosmin | iv | 34 | 600 | 900 |
| Myocardial perfusion – 2 day stress/rest (rest) | Tc-99m | MIBI, tetrofosmin | iv | 34 | 600 | 840 |
| Myocardial perfusion – 1 day stress/rest (stress) | Tc-99m | MIBI, tetrofosmin | iv | 17 | 300 | 430 |
| Myocardial perfusion – 1 day stress/rest (rest) | Tc-99m | MIBI, tetrofosmin | iv | 17 | 1000 | 1000 |
| Myocardial perfusion – 1 day rest/stress (rest) | Tc-99m | MIBI, tetrofosmin | iv | 49 | 400 | 400 |
| Myocardial perfusion – 1 day rest/stress (stress) | Tc-99m | MIBI, tetrofosmin | iv | 49 | 1000 | 1200 |
| Myocardial perfusion – 1 day rest/stress (rest) | Tl-201 | chloride | iv | 6 | 100 | 120 |
| Myocardial perfusion – 1 day rest/stress (stress) | Tc-99m | MIBI, tetrofosmin | iv | 6 | 1000 | 1075 |
| Myocardial viability | F-18 | FDG | iv | 8 | 370 | 370 |
| Parathyroid | Tc-99m | MIBI, tetrofosmin | iv | 71 | 800 | 900 |
| Parathyroid subtraction | Tl-201 | chloride | iv | 3 | NA | NA |
| Parathyroid subtraction | Tc-99m | pertechnetate | iv | 5 | 150 | 150 |
| Renal cystogram | Tc-99m | pertechnetate | bladder | 18 | 40 | 94 |
| Renal scan | Tc-99m | DTPA | iv | 60 | 400 | 600 |
| Renal scan | Tc-99m | DMSA | iv | 68 | 200 | 200 |
| Renal scan | Tc-99m | MAG3 | iv | 63 | 300 | 350 |
| Renal transplant | Tc-99m | DTPA, MAG3 | iv | 34 | 400 | 400 |
| Salivary glands | Tc-99m | pertechnetate | iv | 40 | 185 | 200 |
| Somatostatin receptors | In-111 | Octreotide | iv | 46 | 200 | 235 |
| Spleen | Tc-99m | rbc's denatured | iv | 23 | 200 | 670 |
| Testicular scan | Tc-99m | pertechnetate | iv | 17 | 400 | 600 |
| Thyroid | Tc-99m | pertechnetate | iv | 74 | 200 | 200 |
| Thyroid | I-123 | iodide | iv | 6 | 185 | 345 |
| Thyroid | Tl-201 | chloride | iv | 4 | NA | NA |
| Thyroid – wb scan for Ca | I-131 | iodide | oral | 31 | 200 | 200 |
| Thyroid – wb scan for Ca | I-123 | iodide | oral | 15 | 185 | 450 |
| Tumour | Tc-99m | [V]-DMSA | iv | 8 | 400 | 440 |
| Tumour | Tl-201 | chloride | iv | 30 | 100 | 185 |
| Tumour | Ga-67 | citrate | iv | 53 | 400 | 400 |
| Tumour | I-131 | MIBG | iv infusion | 8 | 37 | 38 |
| Tumour | I-123 | MIBG | iv infusion | 44 | 200 | 400 |
| Tumour | Tc-99m | MIBI | iv | 22 | 800 | 800 |
| Tumour wholebody | F-18 | FDG | iv | 11 | 370 | 385 |
| Venogram | Tc-99m | pertechnetate | iv | 10 | 800 | 800 |

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| Non-Imaging Procedures | | | | | | |
| Breath test | C-14 | urea | oral | 13 | 37 kBq | 37 kBq |
| GIT blood loss | Cr-51 | red cells | iv | 6 | 4 | 5.5 |
| Plasma volume | I-125 | HSA | iv | 5 | 0.2 | 0.5 |
| Red cell survival | Cr-51 | red cells | iv | 5 | 4 | 7 |
| Red cell volume | Cr-51 | red cells | iv | 13 | 4 | 4 |
| Renal GFR | Tc-99m | DTPA | iv | 24 | 60 | 100 |
| Renal GFR | Cr-51 | EDTA | iv | 8 | 4 | 4 |