

# **Handbook D**

**Detector Net Count Rates (cpm)  
For 50 mSv, 250 mSv, and 500 mSv Effective Dose**

**Contaminated Individual**

**Adult Reference Female – 50<sup>th</sup> height/weight percentile**

**Survey Meter**

**Ludlum 44-17 Scintillator Probe (NaI Based)**

**Colored Tabular Entries Denote Count Rates Above or Near Detector Saturation Levels**

**Table D1** Am-241 Inhalation 1-μm AMAD, Type M

**Table D2** Am-241 Inhalation 5-μm AMAD, Type M

**Table D3** Am-241 Ingestion

**Table D4** Co-60 Inhalation 1-μm AMAD, Type M

**Table D5** Co-60 Inhalation 1-μm AMAD, Type S

**Table D6** Co-60 Inhalation 5-μm AMAD, Type M

**Table D7** Co-60 Inhalation 5-μm AMAD, Type S

**Table D8** Co-60 Ingestion

**Table D9** Cs-137 Inhalation 1-μm AMAD, Type F

**Table D10** Cs-137 Inhalation 5-μm AMAD, Type F

**Table D11** Cs-137 Ingestion

**Table D12** I-131 Inhalation 1-μm AMAD, Type F

**Table D13** I-131 Inhalation 5-μm AMAD, Type F

**Table D14** I-131 Ingestion

**Table D15** Ir-192 Inhalation 1-μm AMAD, Type F

**Table D16** Ir-192 Inhalation 1-μm AMAD, Type M

**Table D17** Ir-192 Inhalation 1-μm AMAD, Type S

**Table D18** Ir-192 Inhalation 5-μm AMAD, Type F

**Table D19** Ir-192 Inhalation 5-μm AMAD, Type M

**Table D20** Ir-192 Inhalation 5-μm AMAD, Type S

**Table D21** Ir-192 Ingestion

## Handbook Instructions

This handbook provides users with information – in both tabular and graphical formats – necessary for making triage decisions for individuals known (or suspected) to be internally contaminated with radioactive materials. Decision points are based on the effective dose to a contaminated individual given count rate measurements obtained using a portable survey instrument. Measurements are to be taken at the chest or abdomen (either in front of [AP] or behind [PA] the victim) and at one of four different distances from the skin surface of the individual (6 centimeters [cm], 30 cm, 100 cm, or 200 cm). It is not necessary to remove the individual's clothing for these measurements, but outer layers of clothing especially heavy coats or sweaters should be removed. *The values provided in this handbook are applicable only for the specific radiation survey meter listed on the first page of each handbook.* Handbooks for each survey meter are provided separately for males and females. To find the appropriate handbook, please see the list below. Handbooks for underweight and overweight individuals, as well as children for different weight percentiles, are in development. A software utility is also in development to compile all data from these handbooks.

**Handbook A:** Ludlum 375-30 Waste Monitor for the Adult Male

**Handbook B:** Ludlum 375-30 Waste Monitor for the Adult Female

**Handbook C:** Ludlum 44-17 Scintillator Thyroid Probe for the Adult Male

**Handbook D:** Ludlum 44-17 Scintillator Thyroid Probe for the Adult Female

**Handbook E:** Ludlum 12S Survey Meter for the Adult Male

**Handbook F:** Ludlum 12S Survey Meter for the Adult Female

**Handbook G:** Ludlum 44-9 GM Counter for the Adult Male

**Handbook H:** Ludlum 44-9 GM Counter for the Adult Female

### Initial Conditions Required for Use of this Handbook

1. **Ensure that the person is free from external contamination.** Deliberate care must be taken to ensure that any contaminated clothing has been removed, and that all exposed regions of the skin have been appropriately decontaminated using soap and water or another decontamination agent. When using this handbook, it is assumed that the source of all measured radiation is internal to the individual's body and the person is free of external contamination.
2. **Ensure that measurements will be taken in an area of low background radiation.** When a radiation survey meter is used to measure gamma-rays near a potentially-contaminated person, the detector will respond to radiation coming from both the individual being surveyed and the surrounding environment (ground and air). Either way, each registered radiation event is called a "count," and the survey meter will give an indication of count rate in units of counts per minute (cpm) or kilocounts per minute (kcpm). Higher count rates correspond to higher radiation levels and higher levels of internal contamination. The accuracy of this screening will be greater if the background count rate (i.e., the radioactivity levels at the measurement location) is as low as possible. It would be ideal if all potentially contaminated persons were screened in an enclosed room or other portable facility free from residual contamination from the event.

### Initial Data Required from Responding Health Physics Staff

3. **Estimate the route of radioactivity intake.** In the tables and figures that follow, effective dose values are based – in part – on the route of internal contamination. Radiation dose to the body can differ greatly based on the route of contamination: **inhalation** of radioactive dust and aerosols, or **ingestion** of a liquid or solid radioactive source. Identifying the route of contamination is therefore a critical first step.
4. **Estimate the elapsed time since radioactivity intake.** Following internal contamination, radioisotopes can: 1) move from one organ to another; 2) be excreted from the body; or 3) undergo radioactive decay within the body. Each of these events occurs according to a specific timetable, unique to each particular radionuclide. Because the timetable of events is unique to each radionuclide, it is very important to have a reasonable estimate of the total time between the original contamination event and the time that survey meter readings are made. Graphical data provided in this handbook cover time frames of three orders of

magnitude: from 0.01 to 0.1 days (~15 minutes to ~2.5 hours), from 0.1 to 1 day (~2.5 hours to 24 hours), and from 1 day to 30 days following the contamination event. Similarly, tabular data provided in this handbook cover a time frame of 30 minutes to 30 days.

5. **Identify the radionuclide involved in the contamination event.** Each handbook in this series includes data for five different radionuclides: americium-241, cobalt-60, cesium-137, iodine-131, and iridium-192. If the radionuclide identified by the health physics staff is different from those listed here, or there is a mix of more than one radionuclide, please seek guidance from the health physics staff as to which of the five listed radionuclides may be used as a surrogate until further guidance can be provided.
6. **Select a particle size distribution (1 micrometer [ $\mu\text{m}$ ] or 5  $\mu\text{m}$ ).** Inhaled particles deposit within different regions of the human respiratory tract depending upon their size. The same phenomenon holds true for inhaled radioactive particles. Particle size distribution is typically characterized by the term "activity median aerodynamic diameter" or AMAD, and is given in units of micrometers ( $\mu\text{m}$ ). In these handbooks, two default sizes are assumed: 1  $\mu\text{m}$  or 5  $\mu\text{m}$ . In general, 1  $\mu\text{m}$ -sized particles penetrate deeper into the lungs than do 5  $\mu\text{m}$ -sized particles. Inhaled radioactive particles 1  $\mu\text{m}$  in size will typically yield higher values of effective dose per unit of radioactivity inhaled, than will those of a larger particle size distribution. **If after consultation with your responding health physics staff, the size distribution is unknown, assume a 1  $\mu\text{m}$  AMAD distribution.**
7. **Select a particle lung solubility class (Type F, M, or S).** The solubility of radioactive particles determines their duration of stay within the lungs. Insoluble particles will stay in the lungs for extended periods of time; soluble ones will dissolve, enter the bloodstream, and migrate to other body tissues or be excreted. At most, three classes of lung solubility can be assumed: Type F (fast clearance from the lungs), Type M (medium clearance from the lungs), and Type S (slow clearance from the lungs). Lung solubility class is fixed for Am-241 (Type M), Cs-137 (Type F), and I-131 (Type F). Inhaled aerosol particles of Co-60 may be either Type M or Type S. For Ir-192, all three solubility classes are possible. **If after consultation with your responding health physics staff the particle solubility is unknown, assume Type M solubility for Co-60 and Ir-192.**

## Steps for Conducting Radiological Triage

8. **Perform battery check and check source measurement.** Turn on your radiation survey meter, and perform a check of the detector battery function. If your detector has multiple display settings, select count rate mode in either counts per minute (cpm) or kilocounts per minute (kcpm). Recall that 1 kcpm = 1000 cpm. If a portable radioactive check source is available, move that source closer to and farther away from the front of the detector surface to ensure that the registered count rate increases and decreases accordingly.
9. **Establish the background count rate for your detector and location.** Take an initial radiation meter reading of the environment in the general vicinity of where you will be surveying people. This reading should be obtained prior to the introduction of any potentially contaminated individuals into the location. **Record this value as your Background Count Rate – BCR – in units of cpm or kcpm.** Note: this step additionally assumes that the person taking the measurements is free from all internal or external radioactive contamination.
10. **Choose one of the four detector anatomical positions.** Each handbook in this series includes the information necessary to perform screening at four possible measurement locations: 1) at mid-chest with the individual facing toward you (AP Chest); 2) at mid-chest with the individual facing away from you (PA Chest); 3) at mid-abdomen with the individual facing toward you (AP Abdomen); or 4) at mid-abdomen with the individual facing away from you (PA Abdomen). Here, we use the medical shorthand anterior-posterior (or AP) and posterior-anterior (PA) to distinguish measurements in the front or back of the individual. Handbook data tables provide dose levels that take into account the location at which a measurement may be taken: AP Chest, PA Chest, AP Abdomen, and PA Abdomen. In the included graphs, upper plots are for AP measurements; lower plots are for PA measurements. Solid lines indicate measurements taken at the chest while dashed lines indicate abdominal measurements (as shown in the

figure legends). **The choice of detector position is generally not crucial, but you should pick one position and consistently use that same position for all subject measurements.**

11. **Mark on the floor each of the four different detector distances from your subject.** It is recommended that distances of 6 cm, 30 cm, 100 cm, and 200 cm be marked on the floor relative to the position of the contaminated individual. Using these 4 marked distances as reference points, multiple measurements can be made accurately. Furthermore, readings taken at close distances from moderately to heavily contaminated individuals may exceed the ability of the meter to accurately record them. It may then be necessary to choose a more distant measurement position. Pre-marked reference points at 4 distances from the subject will allow users to more rapidly and more accurately obtain measurements. The four recommended distances are color-coded in this handbook for both data tables and graphs. Due to low detector counting efficiencies, measurements at 100 and 200 cm for the GM probe are not recommended, and associated tables are not provided in Handbooks G and H.

	<i>Distance from subject: 6 cm</i>
	<i>Distance from subject: 30 cm</i>
	<i>Distance from subject: 100 cm</i>
	<i>Distance from subject: 200 cm</i>

12. **Select a detector distance location so as to avoid potential detector saturation.** When a given detector receives a high rate of radiation photon interactions, there is a possibility that the maximum detector count rate will be exceeded. In that case, the survey meter will display erroneous readings and is said to be saturated. Three of the Ludlum instruments provided in this handbook series (Handbooks, A, B, C, D, E, and F) are based on sodium iodide (NaI) detectors with a nominal maximum count rate of 875,000 cpm or 875 kcpm. The fourth detector (given in Handbooks G and H) is a gas-filled Geiger-Müller (or GM) counter which has a nominal maximum count rate of 100,000 cpm or 100 kcpm. When a person is moderately or heavily contaminated, it is possible for the survey meter readings to approach or exceed these nominal maximum values. As explained in Step 11, choosing a more distant measurement location (lower meter reading) will resolve this issue. The shaded areas in the Handbook data tables correspond to situations when the survey meter is expected to be saturated. ***Do not select detector positions and distances that correspond to shaded net count rate values in the data tables. When an individual is moderately to heavily contaminated, it is recommended that measurements be made first at a distance of 100 or 200 cm, and then moved closer unless the detector approaches saturation levels.***

13. **Record your initial survey meter measurement.** Record the detector count rate. Note the units (cpm or kcpm), the anatomical location of the measurement (AP or PA Chest, AP or PA Abdomen), and the distance from the person at which the measurement was made (6, 30, 100, or 200 cm). Note that the background count rate or BCR (see Step 9 above) must be subtracted from the Total Count Rate (TCR) measurement, to yield a Net Count Rate (NCR):

$$\text{Net Count Rate (NCR)} = \text{Total Count Rate (TCR)} - \text{Background Count Rate (BCR)}$$

***Note: All count rates in this handbook are based on total counts above the pulse height threshold, and not simply the full-energy (i.e., photopeak) counts at a given gamma energy.***

14. **Compare the NCR to data tables corresponding to 50, 250, or 500 mSv effective dose.** The Net Count Rate (NCR) from Step 13 is the value used in the handbook data tables and graphs. In the data table for your specific exposure scenario (radionuclide, route of intake, particle size and solubility class), compare the calculated NCR to the tabulated values that correspond to effective doses of 50 mSv, 250 mSv, and 500 mSv. If feasible, confirm your assessment by making additional measurements at closer distances. Initial radiological triage screening may thus be made according to one of four dose ranges: (1) effective dose < 50 mSv, (2) effective dose between 50 and 250 mSv, (3) effective dose between 250 and 500 mSv, or (4) effective dose exceeding 500 mSv. Dose ranges exceeding 50 mSv should be subsequently verified through whole-body counting and/or excreta (bioassay) analysis.

**Table D1 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Americium-241, Inhalation, 1-μm AMAD Aerosol, Type M, f<sub>A</sub> = 0.0005 Ludlum 44-17 Scintillator Probe**

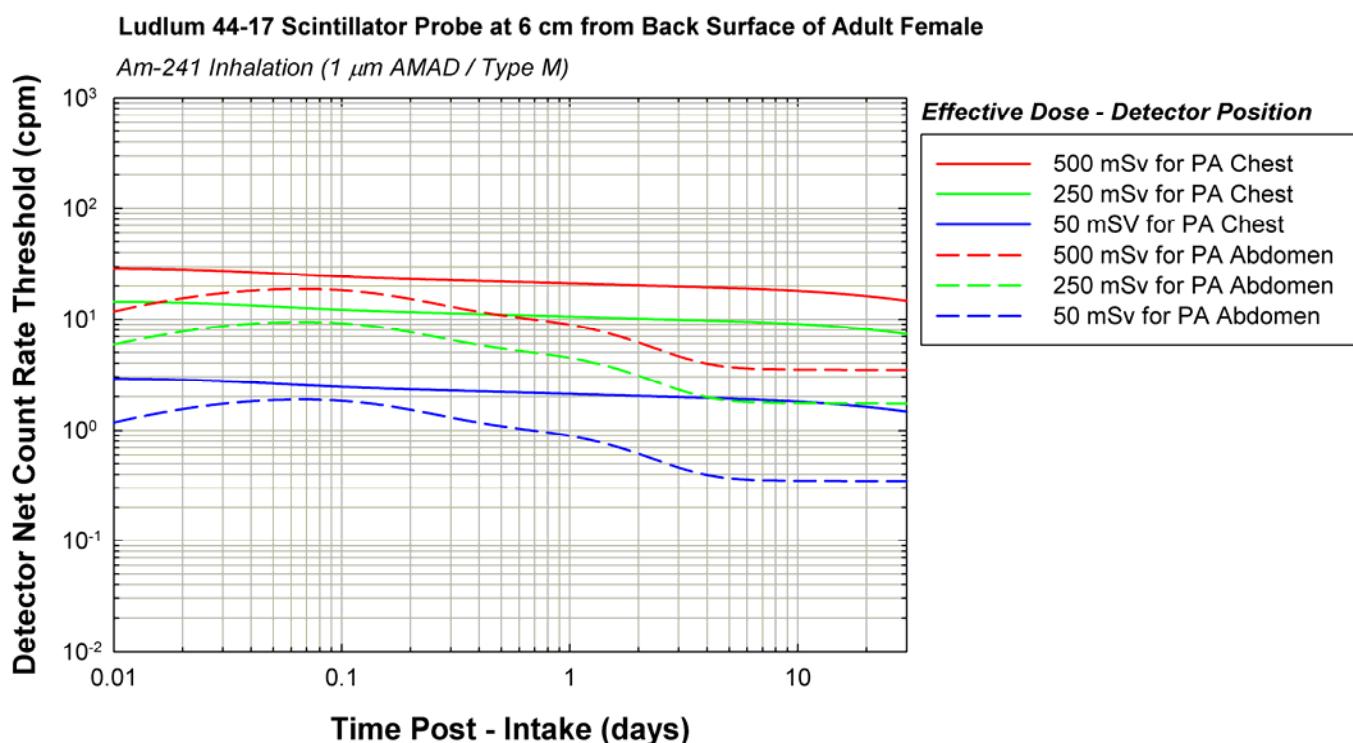
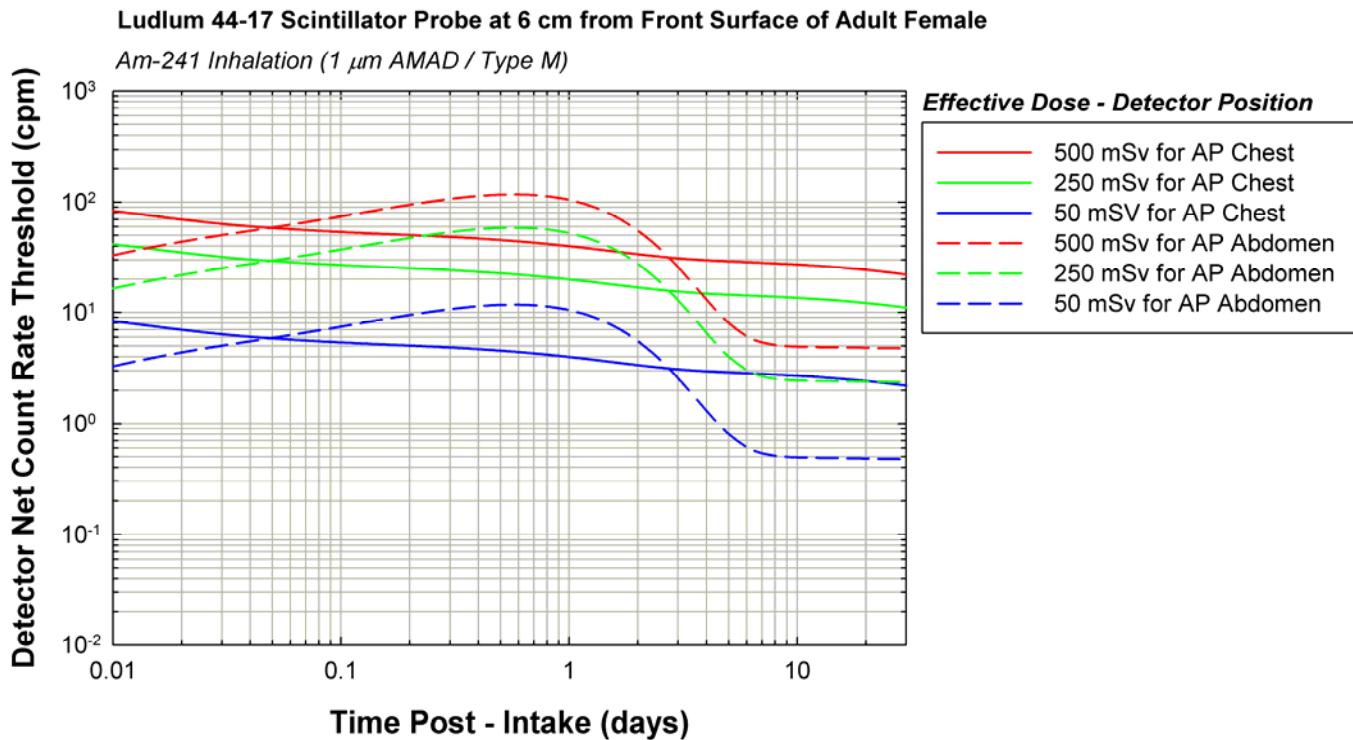
		Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)											
Time Since Intake	Time (days)	Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED			
		AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen
	0.5	6.91E+00	4.44E+00	2.82E+00	1.57E+00	3.46E+01	2.22E+01	1.41E+01	7.86E+00	6.91E+01	4.44E+01	2.82E+01	1.57E+01
	1	6.00E+00	5.57E+00	2.67E+00	1.83E+00	3.00E+01	2.79E+01	1.33E+01	9.15E+00	6.00E+01	5.57E+01	2.67E+01	1.83E+01
	2	5.48E+00	6.98E+00	2.49E+00	1.87E+00	2.74E+01	3.49E+01	1.24E+01	9.37E+00	5.48E+01	6.98E+01	2.49E+01	1.87E+01
	4	5.12E+00	8.91E+00	2.35E+00	1.63E+00	2.56E+01	4.45E+01	1.18E+01	8.15E+00	5.12E+01	8.91E+01	2.35E+01	1.63E+01
	6	4.93E+00	1.02E+01	2.30E+00	1.40E+00	2.47E+01	5.08E+01	1.15E+01	7.02E+00	4.93E+01	1.02E+02	2.30E+01	1.40E+01
	8	4.79E+00	1.10E+01	2.26E+00	1.25E+00	2.39E+01	5.49E+01	1.13E+01	6.27E+00	4.79E+01	1.10E+02	2.26E+01	1.25E+01
	10	4.66E+00	1.15E+01	2.23E+00	1.16E+00	2.33E+01	5.73E+01	1.11E+01	5.78E+00	4.66E+01	1.15E+02	2.23E+01	1.16E+01
	12	4.54E+00	1.17E+01	2.21E+00	1.09E+00	2.27E+01	5.86E+01	1.10E+01	5.45E+00	4.54E+01	1.17E+02	2.21E+01	1.09E+01
	14	4.43E+00	1.17E+01	2.19E+00	1.04E+00	2.22E+01	5.87E+01	1.09E+01	5.22E+00	4.43E+01	1.17E+02	2.19E+01	1.04E+01
	16	4.33E+00	1.17E+01	2.17E+00	1.01E+00	2.17E+01	5.83E+01	1.09E+01	5.04E+00	4.33E+01	1.17E+02	2.17E+01	1.01E+01
	18	4.24E+00	1.15E+01	2.16E+00	9.75E-01	2.12E+01	5.73E+01	1.08E+01	4.88E+00	4.24E+01	1.15E+02	2.16E+01	9.75E+00
	20	4.15E+00	1.12E+01	2.14E+00	9.46E-01	2.08E+01	5.59E+01	1.07E+01	4.73E+00	4.15E+01	1.12E+02	2.14E+01	9.46E+00
1	3.99E+00	1.05E+01	2.12E+00	8.92E-01	2.00E+01	5.24E+01	1.06E+01	4.46E+00	3.99E+01	1.05E+02	2.12E+01	8.92E+00	
2	3.37E+00	5.52E+00	2.03E+00	6.15E-01	1.69E+01	2.76E+01	1.02E+01	3.07E+00	3.37E+01	5.52E+01	2.03E+01	6.15E+00	
3	3.10E+00	2.59E+00	1.98E+00	4.61E-01	1.55E+01	1.29E+01	9.91E+00	2.31E+00	3.10E+01	2.59E+01	1.98E+01	4.61E+00	
4	2.97E+00	1.31E+00	1.95E+00	3.95E-01	1.48E+01	6.54E+00	9.75E+00	1.98E+00	2.97E+01	1.31E+01	1.95E+01	3.95E+00	
5	2.90E+00	8.03E-01	1.92E+00	3.69E-01	1.45E+01	4.01E+00	9.61E+00	1.84E+00	2.90E+01	8.03E+00	1.92E+01	3.69E+00	
6	2.85E+00	6.10E-01	1.90E+00	3.59E-01	1.43E+01	3.05E+00	9.49E+00	1.79E+00	2.85E+01	6.10E+00	1.90E+01	3.59E+00	
7	2.81E+00	5.37E-01	1.88E+00	3.54E-01	1.41E+01	2.69E+00	9.38E+00	1.77E+00	2.81E+01	5.37E+00	1.88E+01	3.54E+00	
8	2.78E+00	5.09E-01	1.85E+00	3.53E-01	1.39E+01	2.55E+00	9.26E+00	1.76E+00	2.78E+01	5.09E+00	1.85E+01	3.53E+00	
9	2.75E+00	4.98E-01	1.83E+00	3.52E-01	1.37E+01	2.49E+00	9.16E+00	1.76E+00	2.75E+01	4.98E+00	1.83E+01	3.52E+00	
10	2.71E+00	4.93E-01	1.81E+00	3.51E-01	1.36E+01	2.47E+00	9.05E+00	1.75E+00	2.71E+01	4.93E+00	1.81E+01	3.51E+00	
15	2.57E+00	4.87E-01	1.72E+00	3.50E-01	1.29E+01	2.44E+00	8.58E+00	1.75E+00	2.57E+01	4.87E+00	1.72E+01	3.50E+00	
20	2.44E+00	4.81E-01	1.62E+00	3.48E-01	1.22E+01	2.41E+00	8.12E+00	1.74E+00	2.44E+01	4.81E+00	1.62E+01	3.48E+00	
25	2.32E+00	4.79E-01	1.55E+00	3.48E-01	1.16E+01	2.39E+00	7.74E+00	1.74E+00	2.32E+01	4.79E+00	1.55E+01	3.48E+00	
30	2.21E+00	4.76E-01	1.47E+00	3.47E-01	1.11E+01	2.38E+00	7.37E+00	1.74E+00	2.21E+01	4.76E+00	1.47E+01	3.47E+00	

		Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)											
Time Since Intake	Time (days)	Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED			
		AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen
	0.5	3.66E+00	1.99E+00	9.06E-01	7.72E-01	1.83E+01	9.93E+00	4.53E+00	3.86E+00	3.66E+01	1.99E+01	9.06E+00	7.72E+00
	1	3.11E+00	2.01E+00	8.64E-01	8.06E-01	1.55E+01	1.01E+01	4.32E+00	4.03E+00	3.11E+01	2.01E+01	8.64E+00	8.06E+00
	2	2.84E+00	2.16E+00	8.00E-01	7.79E-01	1.42E+01	1.08E+01	4.00E+00	3.90E+00	2.84E+01	2.16E+01	8.00E+00	7.79E+00
	4	2.70E+00	2.45E+00	7.34E-01	7.07E-01	1.35E+01	1.23E+01	3.67E+00	3.53E+00	2.70E+01	2.45E+01	7.34E+00	7.07E+00
	6	2.65E+00	2.65E+00	6.98E-01	6.54E-01	1.32E+01	1.32E+01	3.49E+00	3.27E+00	2.65E+01	2.65E+01	6.98E+00	6.54E+00
	8	2.59E+00	2.74E+00	6.74E-01	6.20E-01	1.29E+01	1.37E+01	3.37E+00	3.10E+00	2.59E+01	2.74E+01	6.74E+00	6.20E+00
	10	2.52E+00	2.78E+00	6.56E-01	5.97E-01	1.26E+01	1.39E+01	3.28E+00	2.99E+00	2.52E+01	2.78E+01	6.56E+00	5.97E+00
	12	2.45E+00	2.77E+00	6.42E-01	5.80E-01	1.22E+01	1.39E+01	3.21E+00	2.90E+00	2.45E+01	2.77E+01	6.42E+00	5.80E+00
	14	2.37E+00	2.73E+00	6.31E-01	5.67E-01	1.18E+01	1.36E+01	3.16E+00	2.84E+00	2.37E+01	2.73E+01	6.31E+00	5.67E+00
	16	2.29E+00	2.66E+00	6.21E-01	5.56E-01	1.14E+01	1.33E+01	3.10E+00	2.78E+00	2.29E+01	2.66E+01	6.21E+00	5.56E+00
	18	2.21E+00	2.58E+00	6.12E-01	5.45E-01	1.10E+01	1.29E+01	3.06E+00	2.73E+00	2.21E+01	2.58E+01	6.12E+00	5.45E+00
	20	2.13E+00	2.49E+00	6.03E-01	5.35E-01	1.06E+01	1.25E+01	3.02E+00	2.68E+00	2.13E+01	2.49E+01	6.03E+00	5.35E+00
1	1.97E+00	2.30E+00	5.88E-01	5.16E-01	9.84E+00	1.15E+01	2.94E+00	2.58E+00	1.97E+01	2.30E+01	5.88E+00	5.16E+00	
2	1.27E+00	1.25E+00	5.20E-01	4.16E-01	6.33E+00	6.26E+00	2.60E+00	2.08E+00	1.27E+01	1.25E+01	5.20E+00	4.16E+00	
3	9.33E-01	6.99E-01	4.85E-01	3.61E-01	4.67E+00	3.49E+00	2.43E+00	1.80E+00	9.33E+00	6.99E+00	4.85E+00	3.61E+00	
4	7.95E-01	4.66E-01	4.69E-01	3.36E-01	3.97E+00	2.33E+00	2.34E+00	1.68E+00	7.95E+00	4.66E+00	4.69E+00	3.36E+00	
5	7.37E-01	3.74E-01	4.59E-01	3.25E-01	3.69E+00	1.87E+00	2.30E+00	1.63E+00	7.37E+00	3.74E+00	4.59E+00	3.25E+00	
6	7.12E-01	3.38E-01	4.53E-01	3.20E-01	3.56E+00	1.69E+00	2.27E+00	1.60E+00	7.12E+00	3.38E+00	4.53E+00	3.20E+00	
7	6.98E-01	3.25E-01	4.48E-01	3.16E-01	3.49E+00	1.62E+00	2.24E+00	1.58E+00	6.98E+00	3.25E+00	4.48E+00	3.16E+00	
8	6.89E-01	3.19E-01	4.44E-01	3.13E-01	3.45E+00	1.59E+00	2.22E+00	1.57E+00	6.89E+00	3.19E+00	4.44E+00	3.13E+00	
9	6.82E-01	3.16E-01	4.40E-01	3.11E-01	3.41E+00	1.58E+00	2.20E+00	1.56E+00	6.82E+00	3.16E+00	4.40E+00	3.11E+00	
10	6.76E-01	3.14E-01	4.36E-01	3.09E-01	3.38E+00	1.57E+00	2.18E+00	1.55E+00	6.76E+00	3.14E+00	4.36E+00	3.09E+00	
15	6.50E-01	3.10E-01	4.18E-01	3.00E-01	3.25E+00	1.55E+00	2.09E+00	1.50E+00	6.50E+00	3.10E+00	4.18E+00	3.00E+00	
20	6.24E-01	3.05E-01	4.00E-01	2.91E-01	3.12E+00	1.53E+00	2.00E+00	1.46E+00	6.24E+00	3.05E+00	4.00E+00	2.91E+00	
25	6.04E-01	3.02E-01	3.86E-01	2.84E-01	3.02E+00	1.51E+00	1.93E+00	1.42E+00	6.04E+00	3.02E+00	3.86E+00	2.84E+00	
30	5.83E-01	2.99E-01	3.72E-01	2.78E-01	2.92E+00	1.50E+00	1.86E+00	1.39E+00	5.83E+00	2.99E+00	3.72E+00	2.78E+00	

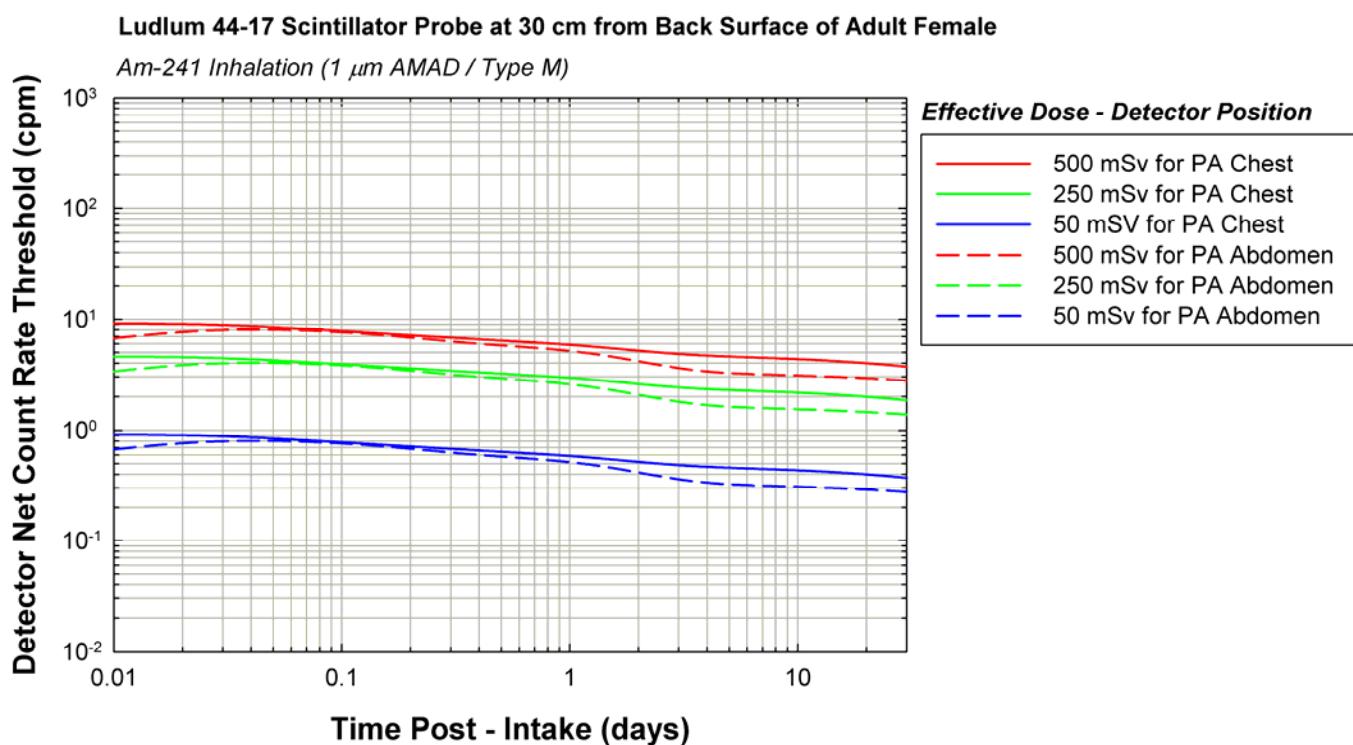
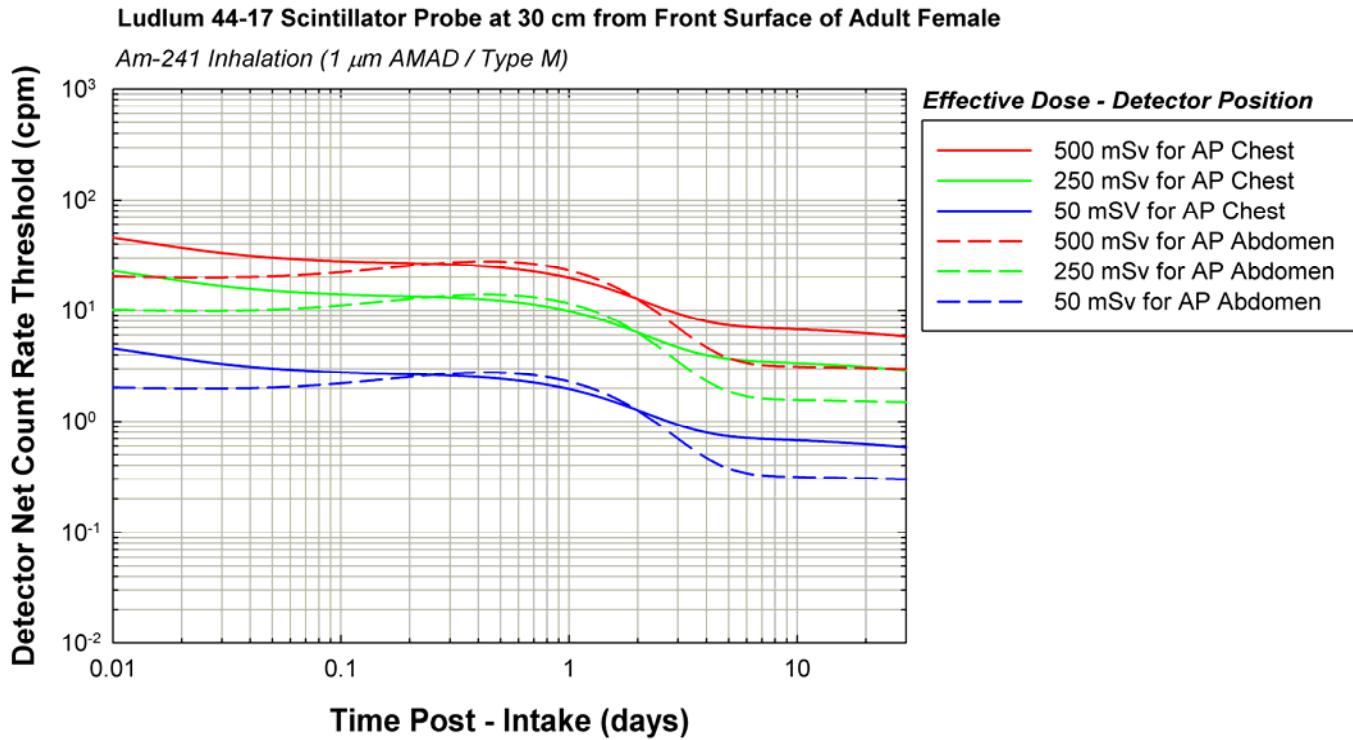
**Table D1** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
*Americium-241, Inhalation, 1- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.0005$  Ludlum 44-17 Scintillator Probe*

***Measurements beyond 30 cm from contaminated individual – not recommended***

**Table D1** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
**Americium-241, Inhalation, 1- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.0005$  Ludlum 44-17 Scintillator Probe**



**Table D1** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
**Americium-241, Inhalation, 1- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.0005$  Ludlum 44-17 Scintillator Probe**



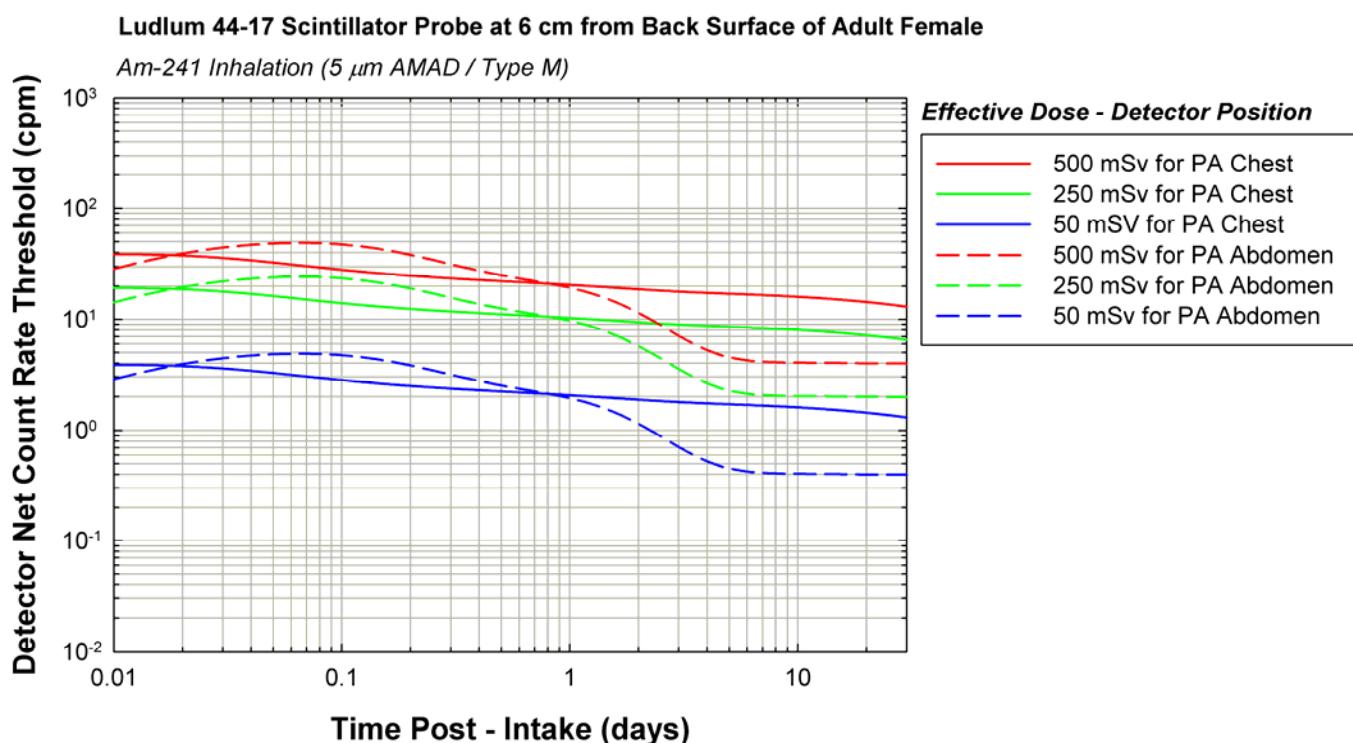
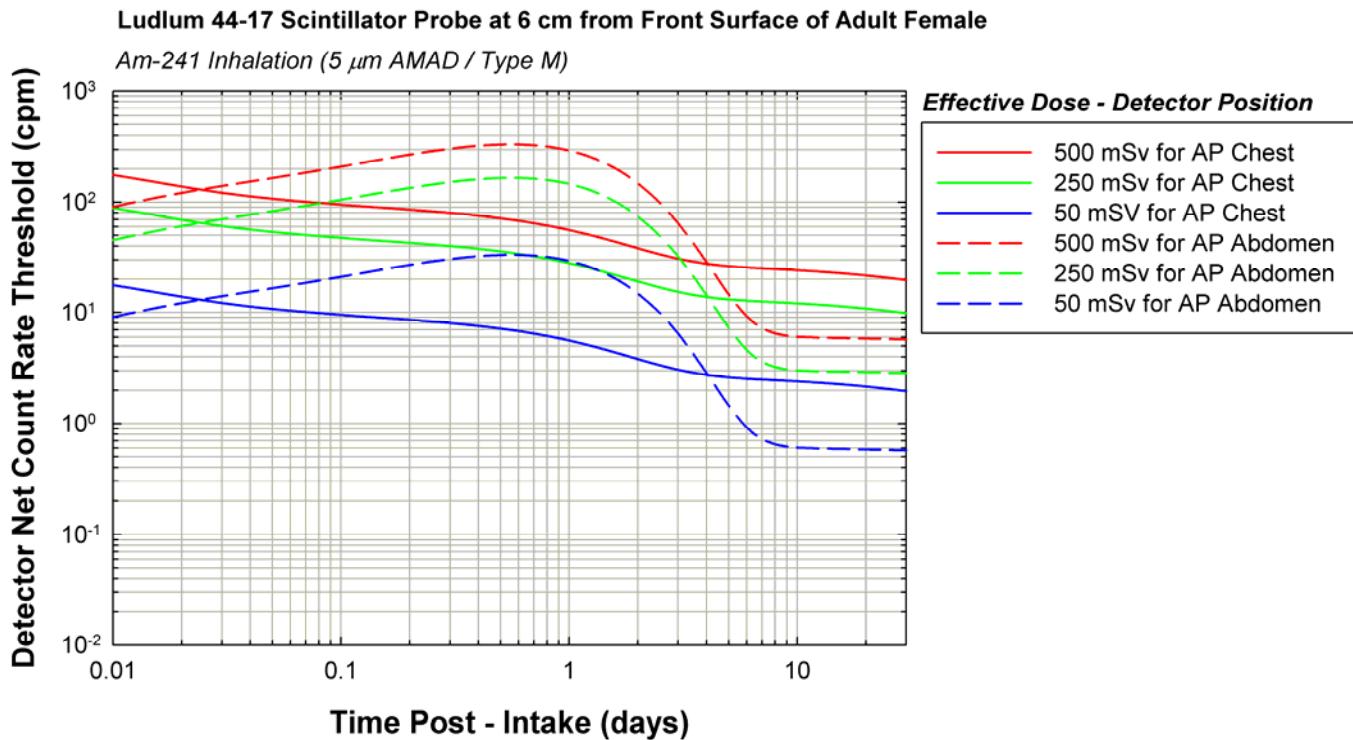
**Table D2 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Americium-241, Inhalation, 5-μm AMAD Aerosol, Type M, f<sub>A</sub> = 0.0005 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)														
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED				
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	
	0.5	1.37E+01	1.23E+01	3.75E+00	3.98E+00	6.85E+01	6.17E+01	1.87E+01	1.99E+01	1.37E+02	1.23E+02	3.75E+01	3.98E+01	
	1	1.12E+01	1.56E+01	3.39E+00	4.73E+00	5.60E+01	7.81E+01	1.69E+01	2.36E+01	1.12E+02	1.56E+02	3.39E+01	4.73E+01	
	2	9.78E+00	1.97E+01	2.92E+00	4.84E+00	4.89E+01	9.86E+01	1.46E+01	2.42E+01	9.78E+01	1.97E+02	2.92E+01	4.84E+01	
	4	8.78E+00	2.53E+01	2.56E+00	4.11E+00	4.39E+01	1.27E+02	1.28E+01	2.06E+01	8.78E+01	2.53E+02	2.56E+01	4.11E+01	
	6	8.26E+00	2.89E+01	2.42E+00	3.44E+00	4.13E+01	1.45E+02	1.21E+01	1.72E+01	8.26E+01	2.89E+02	2.42E+01	3.44E+01	
	8	7.85E+00	3.12E+01	2.33E+00	3.00E+00	3.92E+01	1.56E+02	1.17E+01	1.50E+01	7.85E+01	3.12E+02	2.33E+01	3.00E+01	
	10	7.48E+00	3.25E+01	2.27E+00	2.71E+00	3.74E+01	1.63E+02	1.14E+01	1.35E+01	7.48E+01	3.25E+02	2.27E+01	2.71E+01	
	12	7.15E+00	3.32E+01	2.23E+00	2.51E+00	3.58E+01	1.66E+02	1.11E+01	1.26E+01	7.15E+01	3.32E+02	2.23E+01	2.51E+01	
	14	6.85E+00	3.32E+01	2.19E+00	2.38E+00	3.43E+01	1.66E+02	1.10E+01	1.19E+01	6.85E+01	3.32E+02	2.19E+01	2.38E+01	
	16	6.57E+00	3.29E+01	2.16E+00	2.27E+00	3.28E+01	1.64E+02	1.08E+01	1.13E+01	6.57E+01	3.29E+02	2.16E+01	2.27E+01	
	18	6.30E+00	3.23E+01	2.13E+00	2.18E+00	3.15E+01	1.61E+02	1.07E+01	1.09E+01	6.30E+01	3.23E+02	2.13E+01	2.18E+01	
	20	6.05E+00	3.14E+01	2.11E+00	2.09E+00	3.02E+01	1.57E+02	1.05E+01	1.05E+01	6.05E+01	3.14E+02	2.11E+01	2.09E+01	
1	5.59E+00	2.93E+01	2.06E+00	1.94E+00	2.80E+01	1.46E+02	1.03E+01	9.69E+00	5.59E+01	2.93E+02	2.06E+01	1.94E+01		
2	3.82E+00	1.48E+01	1.88E+00	1.14E+00	1.91E+01	7.42E+01	9.40E+00	5.72E+00	3.82E+01	1.48E+02	1.88E+01	1.14E+01		
3	3.07E+00	6.47E+00	1.79E+00	7.10E-01	1.54E+01	3.24E+01	8.95E+00	3.55E+00	3.07E+01	6.47E+01	1.79E+01	7.10E+00		
4	2.76E+00	2.87E+00	1.74E+00	5.25E-01	1.38E+01	1.44E+01	8.71E+00	2.63E+00	2.76E+01	2.87E+01	1.74E+01	5.25E+00		
5	2.63E+00	1.46E+00	1.71E+00	4.52E-01	1.31E+01	7.30E+00	8.56E+00	2.26E+00	2.63E+01	1.46E+01	1.71E+01	4.52E+00		
6	2.56E+00	9.24E-01	1.69E+00	4.24E-01	1.28E+01	4.62E+00	8.43E+00	2.12E+00	2.56E+01	9.24E+00	1.69E+01	4.24E+00		
7	2.51E+00	7.22E-01	1.66E+00	4.13E-01	1.26E+01	3.61E+00	8.32E+00	2.07E+00	2.51E+01	7.22E+00	1.66E+01	4.13E+00		
8	2.48E+00	6.46E-01	1.64E+00	4.09E-01	1.24E+01	3.23E+00	8.22E+00	2.04E+00	2.48E+01	6.46E+00	1.64E+01	4.09E+00		
9	2.44E+00	6.17E-01	1.62E+00	4.07E-01	1.22E+01	3.08E+00	8.12E+00	2.03E+00	2.44E+01	6.17E+00	1.62E+01	4.07E+00		
10	2.42E+00	6.04E-01	1.61E+00	4.05E-01	1.21E+01	3.02E+00	8.03E+00	2.03E+00	2.42E+01	6.04E+00	1.61E+01	4.05E+00		
15	2.29E+00	5.93E-01	1.52E+00	4.03E-01	1.15E+01	2.97E+00	7.61E+00	2.01E+00	2.29E+01	5.93E+00	1.52E+01	4.03E+00		
20	2.17E+00	5.82E-01	1.44E+00	4.00E-01	1.08E+01	2.91E+00	7.19E+00	2.00E+00	2.17E+01	5.82E+00	1.44E+01	4.00E+00		
25	2.07E+00	5.77E-01	1.37E+00	3.99E-01	1.03E+01	2.89E+00	6.86E+00	2.00E+00	2.07E+01	5.77E+00	1.37E+01	3.99E+00		
30	1.97E+00	5.73E-01	1.31E+00	3.98E-01	9.83E+00	2.86E+00	6.53E+00	1.99E+00	1.97E+01	5.73E+00	1.31E+01	3.98E+00		
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm )														
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED				
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	
	0.5	9.42E+00	5.31E+00	1.65E+00	1.60E+00	4.71E+01	2.65E+01	8.26E+00	7.99E+00	9.42E+01	5.31E+01	1.65E+01	1.60E+01	
	1	7.82E+00	5.38E+00	1.54E+00	1.70E+00	3.91E+01	2.69E+01	7.71E+00	8.51E+00	7.82E+01	5.38E+01	1.54E+01	1.70E+01	
	2	7.03E+00	5.81E+00	1.36E+00	1.62E+00	3.52E+01	2.90E+01	6.80E+00	8.12E+00	7.03E+01	5.81E+01	1.36E+01	1.62E+01	
	4	6.63E+00	6.65E+00	1.17E+00	1.41E+00	3.31E+01	3.33E+01	5.85E+00	7.06E+00	6.63E+01	6.65E+01	1.17E+01	1.41E+01	
	6	6.45E+00	7.19E+00	1.07E+00	1.26E+00	3.23E+01	3.60E+01	5.34E+00	6.29E+00	6.45E+01	7.19E+01	1.07E+01	1.26E+01	
	8	6.26E+00	7.46E+00	1.00E+00	1.16E+00	3.13E+01	3.73E+01	5.01E+00	5.80E+00	6.26E+01	7.46E+01	1.00E+01	1.16E+01	
	10	6.05E+00	7.55E+00	9.53E-01	1.09E+00	3.03E+01	3.77E+01	4.77E+00	5.46E+00	6.05E+01	7.55E+01	9.53E+00	1.09E+01	
	12	5.83E+00	7.50E+00	9.16E-01	1.04E+00	2.91E+01	3.75E+01	4.58E+00	5.22E+00	5.83E+01	7.50E+01	9.16E+00	1.04E+01	
	14	5.58E+00	7.36E+00	8.86E-01	1.01E+00	2.79E+01	3.68E+01	4.43E+00	5.04E+00	5.58E+01	7.36E+01	8.86E+00	1.01E+01	
	16	5.34E+00	7.15E+00	8.59E-01	9.76E-01	2.67E+01	3.58E+01	4.30E+00	4.88E+00	5.34E+01	7.15E+01	8.59E+00	9.76E+00	
	18	5.09E+00	6.91E+00	8.35E-01	9.46E-01	2.55E+01	3.46E+01	4.17E+00	4.73E+00	5.09E+01	6.91E+01	8.35E+00	9.46E+00	
	20	4.85E+00	6.65E+00	8.12E-01	9.18E-01	2.42E+01	3.32E+01	4.06E+00	4.59E+00	4.85E+01	6.65E+01	8.12E+00	9.18E+00	
1	4.37E+00	6.07E+00	7.70E-01	8.63E-01	2.19E+01	3.03E+01	3.85E+00	4.32E+00	4.37E+01	6.07E+01	7.70E+00	8.63E+00		
2	2.28E+00	3.00E+00	5.86E-01	5.82E-01	1.14E+01	1.50E+01	2.93E+00	2.91E+00	2.28E+01	3.00E+01	5.86E+00	5.82E+00		
3	1.32E+00	1.43E+00	4.96E-01	4.30E-01	6.58E+00	7.13E+00	2.48E+00	2.15E+00	1.32E+01	1.43E+01	4.96E+00	4.30E+00		
4	9.24E-01	7.68E-01	4.57E-01	3.65E-01	4.62E+00	3.84E+00	2.29E+00	1.82E+00	9.24E+00	7.68E+00	4.57E+00	3.65E+00		
5	7.71E-01	5.12E-01	4.40E-01	3.38E-01	3.85E+00	2.56E+00	2.20E+00	1.69E+00	7.71E+00	5.12E+00	4.40E+00	3.38E+00		
6	7.09E-01	4.14E-01	4.31E-01	3.26E-01	3.55E+00	2.07E+00	2.15E+00	1.63E+00	7.09E+00	4.14E+00	4.31E+00	3.26E+00		
7	6.83E-01	3.77E-01	4.25E-01	3.21E-01	3.42E+00	1.89E+00	2.12E+00	1.60E+00	6.83E+00	3.77E+00	4.25E+00	3.21E+00		
8	6.70E-01	3.63E-01	4.20E-01	3.17E-01	3.35E+00	1.81E+00	2.10E+00	1.59E+00	6.70E+00	3.63E+00	4.20E+00	3.17E+00		
9	6.61E-01	3.57E-01	4.16E-01	3.15E-01	3.31E+00	1.78E+00	2.08E+00	1.57E+00	6.61E+00	3.57E+00	4.16E+00	3.15E+00		
10	6.55E-01	3.53E-01	4.12E-01	3.13E-01	3.27E+00	1.77E+00	2.06E+00	1.56E+00	6.55E+00	3.53E+00	4.12E+00	3.13E+00		
15	6.31E-01	3.48E-01	3.96E-01	3.04E-01	3.15E+00	1.74E+00	1.98E+00	1.52E+00	6.31E+00	3.48E+00	3.96E+00	3.04E+00		
20	6.06E-01	3.42E-01	3.80E-01	2.96E-01	3.03E+00	1.71E+00	1.90E+00	1.48E+00	6.06E+00	3.42E+00	3.80E+00	2.96E+00		
25	5.88E-01	3.39E-01	3.67E-01	2.90E-01	2.94E+00	1.70E+00	1.84E+00	1.45E+00	5.88E+00	3.39E+00	3.67E+00	2.90E+00		
30	5.69E-01	3.36E-01	3.55E-01	2.84E-01	2.84E+00	1.68E+00	1.77E+00	1.42E+00	5.69E+00	3.36E+00	3.55E+00	2.84E+00		

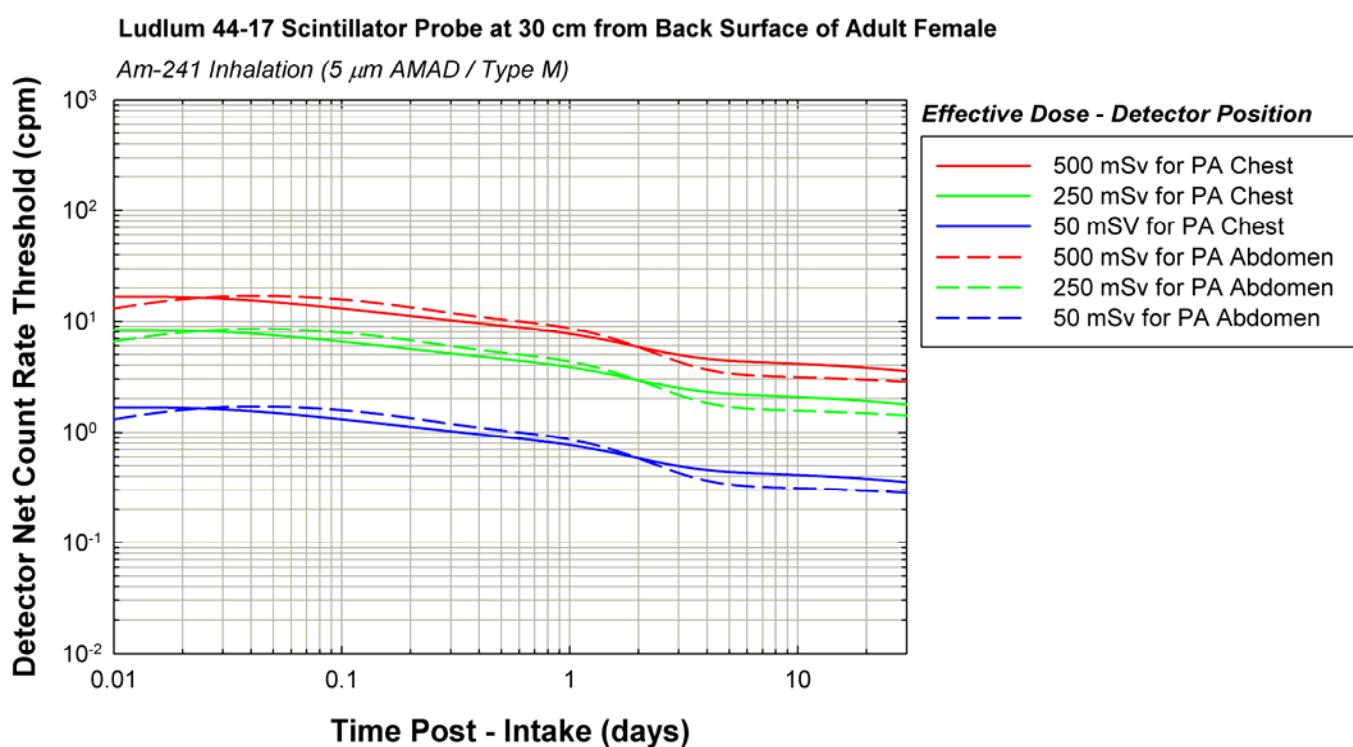
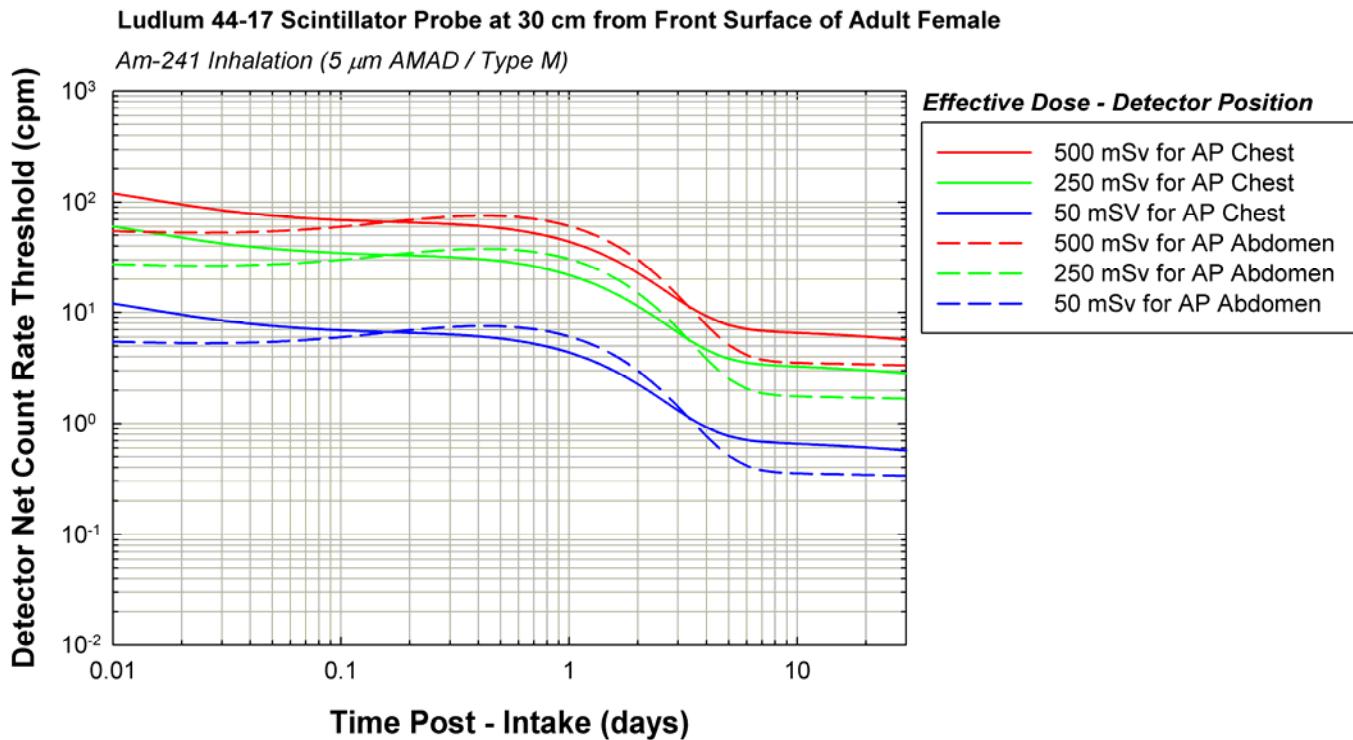
**Table D2** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
*Americium-241, Inhalation, 5- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.0005$  Ludlum 44-17 Scintillator Probe*

***Measurements beyond 30 cm from contaminated individual – not recommended***

**Table D2 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Americium-241, Inhalation, 5- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.0005$  **Ludlum 44-17 Scintillator Probe****



**Table D2** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
**Americium-241, Inhalation, 5- $\mu\text{m}$  AMAD Aerosol, Type M,  $f_A = 0.0005$  Ludlum 44-17 Scintillator Probe**



**Table D3 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Americium-241, Ingestion,  $f_A = 0.0005$  Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	7.21E+02	4.88E+03	3.83E+02	1.54E+03	3.61E+03	2.44E+04	1.91E+03	7.72E+03	7.21E+03	4.88E+04	3.83E+03	1.54E+04		
	1	5.18E+02	5.71E+03	2.89E+02	1.62E+03	2.59E+03	2.85E+04	1.44E+03	8.12E+03	5.18E+03	5.71E+04	2.89E+03	1.62E+04		
	2	3.19E+02	7.05E+03	1.88E+02	1.57E+03	1.59E+03	3.52E+04	9.42E+02	7.87E+03	3.19E+03	7.05E+04	1.88E+03	1.57E+04		
	4	2.21E+02	8.92E+03	1.18E+02	1.28E+03	1.11E+03	4.46E+04	5.92E+02	6.39E+03	2.21E+03	8.92E+04	1.18E+03	1.28E+04		
	6	2.16E+02	1.01E+04	9.48E+01	1.04E+03	1.08E+03	5.06E+04	4.74E+02	5.21E+03	2.16E+03	1.01E+05	9.48E+02	1.04E+04		
	8	2.23E+02	1.09E+04	8.32E+01	8.89E+02	1.12E+03	5.43E+04	4.16E+02	4.44E+03	2.23E+03	1.09E+05	8.32E+02	8.89E+03		
	10	2.31E+02	1.13E+04	7.60E+01	7.90E+02	1.16E+03	5.64E+04	3.80E+02	3.95E+03	2.31E+03	1.13E+05	7.60E+02	7.90E+03		
	12	2.37E+02	1.15E+04	7.12E+01	7.24E+02	1.19E+03	5.73E+04	3.56E+02	3.62E+03	2.37E+03	1.15E+05	7.12E+02	7.24E+03		
	14	2.41E+02	1.14E+04	6.78E+01	6.78E+02	1.20E+03	5.72E+04	3.39E+02	3.39E+03	2.41E+03	1.14E+05	6.78E+02	6.78E+03		
	16	2.41E+02	1.13E+04	6.48E+01	6.42E+02	1.21E+03	5.65E+04	3.24E+02	3.21E+03	2.41E+03	1.13E+05	6.48E+02	6.42E+03		
	18	2.40E+02	1.10E+04	6.21E+01	6.10E+02	1.20E+03	5.52E+04	3.10E+02	3.05E+03	2.40E+03	1.10E+05	6.21E+02	6.10E+03		
	20	2.36E+02	1.07E+04	5.95E+01	5.81E+02	1.18E+03	5.36E+04	2.97E+02	2.90E+03	2.36E+03	1.07E+05	5.95E+02	5.81E+03		
1	2.25E+02	9.94E+03	5.43E+01	5.26E+02	1.12E+03	4.97E+04	2.71E+02	2.63E+03	2.25E+03	9.94E+04	5.43E+02	5.26E+03			
2	1.18E+02	4.86E+03	2.63E+01	2.51E+02	5.91E+02	2.43E+04	1.31E+02	1.25E+03	1.18E+03	4.86E+04	2.63E+02	2.51E+03			
3	4.97E+01	1.99E+03	1.09E+01	1.02E+02	2.48E+02	9.93E+03	5.46E+01	5.11E+02	4.97E+02	1.99E+04	1.09E+02	1.02E+03			
4	1.96E+01	7.64E+02	4.40E+00	3.95E+01	9.79E+01	3.82E+03	2.20E+01	1.98E+02	1.96E+02	7.64E+03	4.40E+01	3.95E+02			
5	7.69E+00	2.87E+02	1.86E+00	1.51E+01	3.85E+01	1.43E+03	9.31E+00	7.55E+01	7.69E+01	2.87E+03	1.86E+01	1.51E+02			
6	3.19E+00	1.07E+02	9.04E-01	5.90E+00	1.59E+01	5.34E+02	4.52E+00	2.95E+01	3.19E+01	1.07E+03	9.04E+00	5.90E+01			
7	1.51E+00	3.99E+01	5.48E-01	2.48E+00	7.55E+00	2.00E+02	2.74E+00	1.24E+01	1.51E+01	3.99E+02	5.48E+00	2.48E+01			
8	8.89E-01	1.52E+01	4.16E-01	1.21E+00	4.44E+00	7.60E+01	2.08E+00	6.06E+00	8.89E+00	1.52E+02	4.16E+00	1.21E+01			
9	6.59E-01	6.07E+00	3.67E-01	7.45E-01	3.30E+00	3.04E+01	1.84E+00	3.73E+00	6.59E+00	6.07E+01	3.67E+00	7.45E+00			
10	5.75E-01	2.71E+00	3.50E-01	5.73E-01	2.87E+00	1.36E+01	1.75E+00	2.86E+00	5.75E+00	2.71E+01	3.50E+00	5.73E+00			
15	5.50E-01	1.72E+00	3.44E-01	5.21E-01	2.75E+00	8.62E+00	1.72E+00	2.60E+00	5.50E+00	1.72E+01	3.44E+00	5.21E+00			
20	5.25E-01	7.37E-01	3.39E-01	4.69E-01	2.63E+00	3.69E+00	1.70E+00	2.35E+00	5.25E+00	7.37E+00	3.39E+00	4.69E+00			
25	5.25E-01	7.31E-01	3.39E-01	4.68E-01	2.62E+00	3.66E+00	1.70E+00	2.34E+00	5.25E+00	7.31E+00	3.39E+00	4.68E+00			
30	5.24E-01	7.25E-01	3.39E-01	4.67E-01	2.62E+00	3.63E+00	1.70E+00	2.33E+00	5.24E+00	7.25E+00	3.39E+00	4.67E+00			

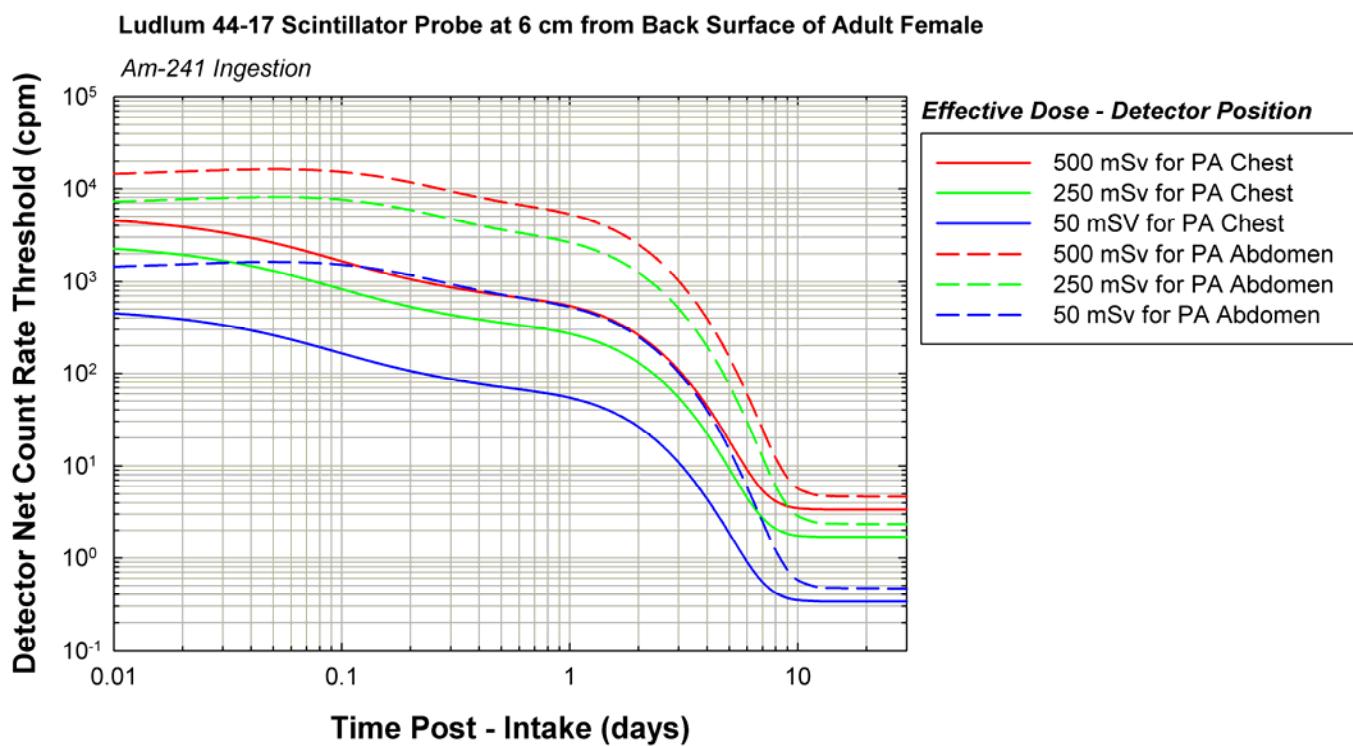
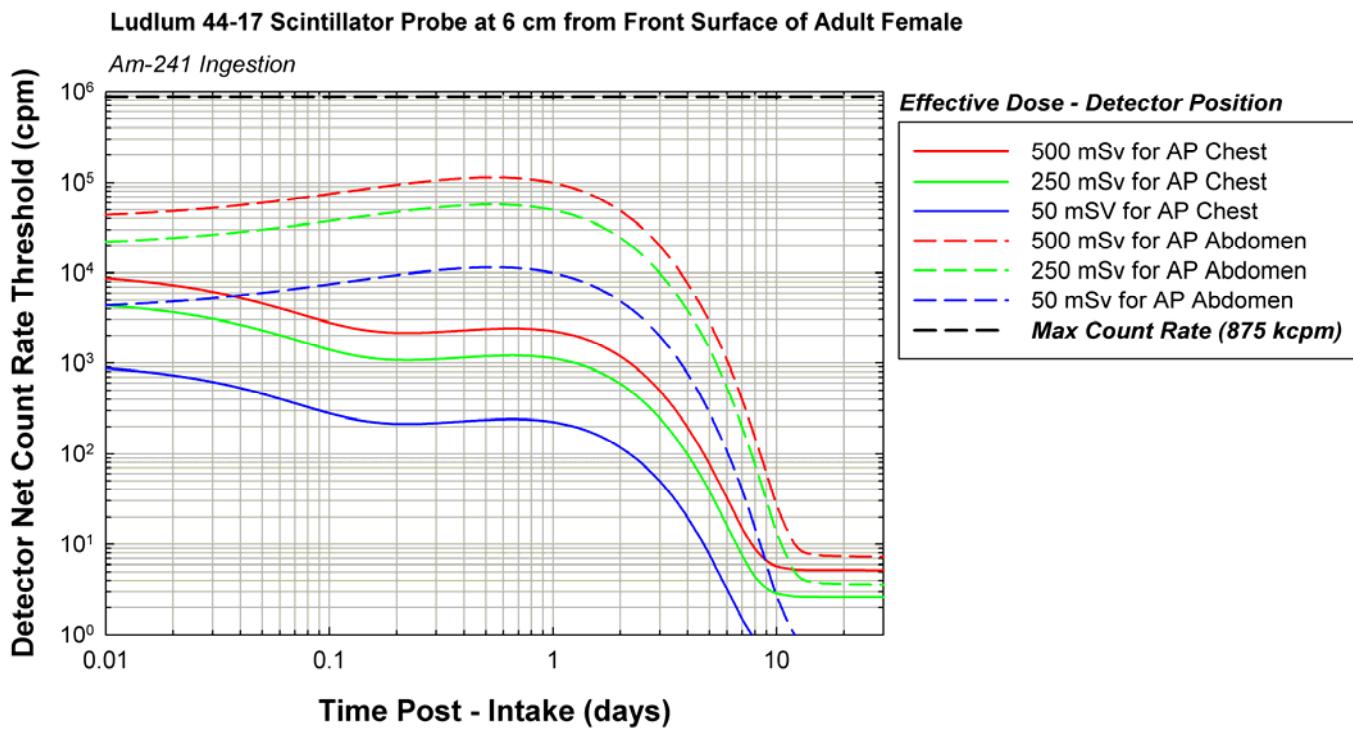
  

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	9.11E+02	1.34E+03	2.86E+02	4.83E+02	4.55E+03	6.72E+03	1.43E+03	2.41E+03	9.11E+03	1.34E+04	2.86E+03	4.83E+03		
	1	7.67E+02	1.42E+03	2.47E+02	4.70E+02	3.83E+03	7.09E+03	1.24E+03	2.35E+03	7.67E+03	1.42E+04	2.47E+03	4.70E+03		
	2	6.57E+02	1.60E+03	1.98E+02	4.31E+02	3.29E+03	7.99E+03	9.88E+02	2.16E+03	6.57E+03	1.60E+04	1.98E+03	4.31E+03		
	4	6.72E+02	1.92E+03	1.49E+02	3.56E+02	3.36E+03	9.60E+03	7.43E+02	1.78E+03	6.72E+03	1.92E+04	1.49E+03	3.56E+03		
	6	7.28E+02	2.12E+03	1.24E+02	3.05E+02	3.64E+03	1.06E+04	6.21E+02	1.53E+03	7.28E+03	2.12E+04	1.24E+03	3.05E+03		
	8	7.67E+02	2.23E+03	1.10E+02	2.73E+02	3.83E+03	1.11E+04	5.51E+02	1.37E+03	7.67E+03	2.23E+04	1.10E+03	2.73E+03		
	10	7.87E+02	2.27E+03	1.01E+02	2.52E+02	3.94E+03	1.14E+04	5.07E+02	1.26E+03	7.87E+03	2.27E+04	1.01E+03	2.52E+03		
	12	7.93E+02	2.27E+03	9.52E+01	2.37E+02	3.97E+03	1.13E+04	4.76E+02	1.18E+03	7.93E+03	2.27E+04	9.52E+02	2.37E+03		
	14	7.87E+02	2.23E+03	9.07E+01	2.25E+02	3.93E+03	1.11E+04	4.53E+02	1.13E+03	7.87E+03	2.23E+04	9.07E+02	2.25E+03		
	16	7.73E+02	2.17E+03	8.68E+01	2.15E+02	3.86E+03	1.08E+04	4.34E+02	1.07E+03	7.73E+03	2.17E+04	8.68E+02	2.15E+03		
	18	7.53E+02	2.09E+03	8.32E+01	2.06E+02	3.76E+03	1.05E+04	4.16E+02	1.03E+03	7.53E+03	2.09E+04	8.32E+02	2.06E+03		
	20	7.29E+02	2.01E+03	7.97E+01	1.96E+02	3.64E+03	1.01E+04	3.98E+02	9.82E+02	7.29E+03	2.01E+04	7.97E+02	1.96E+03		
1	6.72E+02	1.83E+03	7.27E+01	1.79E+02	3.36E+03	9.16E+03	3.64E+02	8.93E+02	6.72E+03	1.83E+04	7.27E+02	1.79E+03			
2	3.24E+02	8.50E+02	3.50E+01	8.47E+01	1.62E+03	4.25E+03	1.75E+02	4.24E+02	3.24E+03	8.50E+03	3.50E+02	8.47E+02			
3	1.32E+02	3.42E+02	1.44E+01	3.45E+01	6.60E+02	1.71E+03	7.20E+01	1.73E+02	1.32E+03	3.42E+03	1.44E+02	3.45E+02			
4	5.08E+01	1.31E+02	5.65E+00	1.34E+01	2.54E+02	6.54E+02	2.82E+01	6.68E+01	5.08E+02	1.31E+03	5.65E+01	1.34E+02			
5	1.93E+01	4.91E+01	2.24E+00	5.15E+00	9.64E+01	2.46E+02	1.12E+01	2.57E+01	1.93E+02	4.91E+02	2.24E+01	5.15E+01			
6	7.37E+00	1.84E+01	9.53E-01	2.05E+00	3.68E+01	9.22E+01	4.76E+00	1.03E+01	7.37E+01	1.84E+02	9.53E+00	2.05E+01			
7	2.94E+00	7.04E+00	4.75E-01	9.01E-01	1.47E+01	3.52E+01	2.37E+00	4.51E+00	2.94E+01	7.04E+01	4.75E+00	9.01E+00			
8	1.30E+00	2.83E+00	2.98E-01	4.76E-01	6.51E+00	1.41E+01	1.49E+00	2.38E+00	1.30E+01	2.83E+01	2.98E+00	4.76E+00			
9	6.99E-01	1.28E+00	2.32E-01	3.19E-01	3.50E+00	6.38E+00	1.16E+00	1.59E+00	6.99E+00	1.28E+01	2.32E+00	3.19E+00			
10	4.77E-01	7.03E-01	2.08E-01	2.61E-01	2.38E+00	3.52E+00	1.04E+00	1.30E+00	4.77E+00	7.03E+00	2.08E+00	2.61E+00			

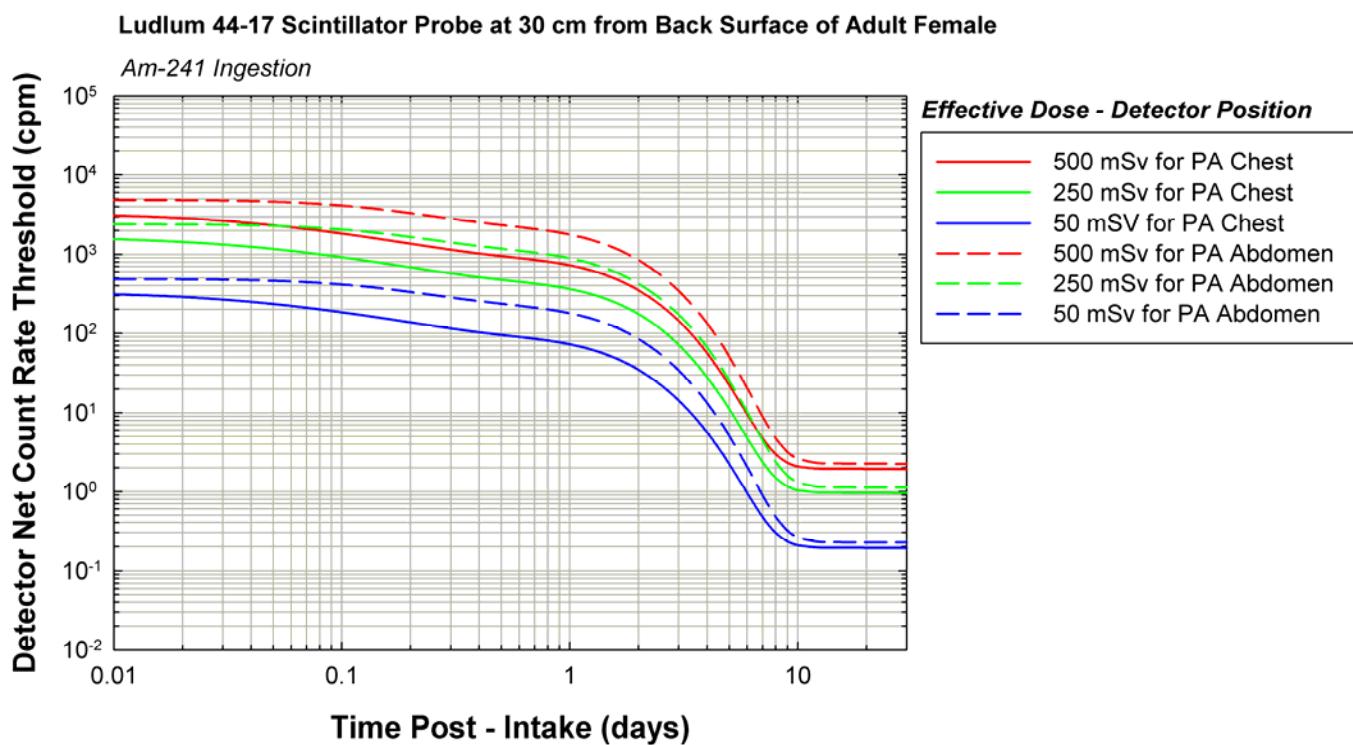
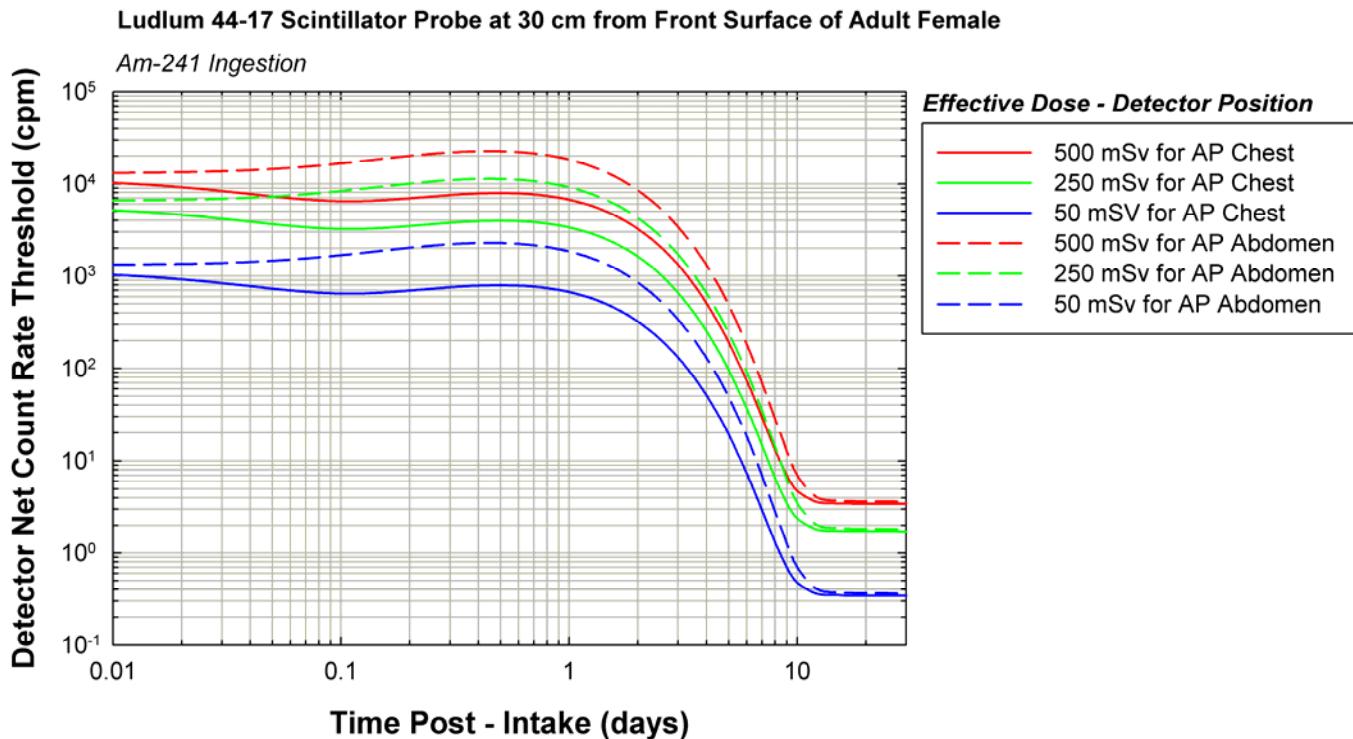
**Table D3** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
*Americium-241, Ingestion, f<sub>A</sub> = 0.0005 Ludlum 44-17 Scintillator Probe*

***Measurements beyond 30 cm from contaminated individual – not recommended***

**Table D3 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Americium-241, Ingestion,  $f_A = 0.0005$  *Ludlum 44-17 Scintillator Probe***



**Table D3** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
**Americium-241, Ingestion,  $f_A = 0.0005$  Ludlum 44-17 Scintillator Probe**



**Table D4 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Cobalt-60, Inhalation, 1-μm AMAD Aerosol, Type M, f<sub>A</sub> = 0.10 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		1.32E+05	9.76E+04	8.94E+04	7.69E+04	6.58E+05	4.88E+05	4.47E+05	3.85E+05	1.32E+06	9.76E+05	8.94E+05	7.69E+05		
1		1.25E+05	1.10E+05	8.69E+04	8.52E+04	6.26E+05	5.51E+05	4.34E+05	4.26E+05	1.25E+06	1.10E+06	8.69E+05	8.52E+05		
2		1.16E+05	1.17E+05	8.14E+04	8.58E+04	5.82E+05	5.87E+05	4.07E+05	4.29E+05	1.16E+06	1.17E+06	8.14E+05	8.58E+05		
4		1.10E+05	1.22E+05	7.64E+04	7.96E+04	5.49E+05	6.12E+05	3.82E+05	3.98E+05	1.10E+06	1.22E+06	7.64E+05	7.96E+05		
6		1.06E+05	1.24E+05	7.38E+04	7.41E+04	5.32E+05	6.22E+05	3.69E+05	3.71E+05	1.06E+06	1.24E+06	7.38E+05	7.41E+05		
8		1.04E+05	1.25E+05	7.18E+04	7.03E+04	5.18E+05	6.25E+05	3.59E+05	3.52E+05	1.04E+06	1.25E+06	7.18E+05	7.03E+05		
10		1.01E+05	1.25E+05	7.01E+04	6.75E+04	5.05E+05	6.23E+05	3.51E+05	3.37E+05	1.01E+06	1.25E+06	7.01E+05	6.75E+05		
12		9.84E+04	1.23E+05	6.86E+04	6.52E+04	4.92E+05	6.16E+05	3.43E+05	3.26E+05	9.84E+05	1.23E+06	6.86E+05	6.52E+05		
14		9.59E+04	1.21E+05	6.72E+04	6.33E+04	4.80E+05	6.06E+05	3.36E+05	3.16E+05	9.59E+05	1.21E+06	6.72E+05	6.33E+05		
16		9.35E+04	1.18E+05	6.58E+04	6.14E+04	4.67E+05	5.92E+05	3.29E+05	3.07E+05	9.35E+05	1.18E+06	6.58E+05	6.14E+05		
18		9.12E+04	1.15E+05	6.45E+04	5.95E+04	4.56E+05	5.76E+05	3.23E+05	2.98E+05	9.12E+05	1.15E+06	6.45E+05	5.95E+05		
20		8.89E+04	1.12E+05	6.33E+04	5.77E+04	4.45E+05	5.58E+05	3.16E+05	2.88E+05	8.89E+05	1.12E+06	6.33E+05	5.77E+05		
1		8.47E+04	1.04E+05	6.10E+04	5.40E+04	4.24E+05	5.20E+05	3.05E+05	2.70E+05	8.47E+05	1.04E+06	6.10E+05	5.40E+05		
2		6.78E+04	6.02E+04	5.16E+04	3.54E+04	3.39E+05	3.01E+05	2.58E+05	1.77E+05	6.78E+05	6.02E+05	5.16E+05	3.54E+05		
3		6.01E+04	3.60E+04	4.72E+04	2.55E+04	3.00E+05	1.80E+05	2.36E+05	1.27E+05	6.01E+05	3.60E+05	4.72E+05	2.55E+05		
4		5.66E+04	2.54E+04	4.50E+04	2.11E+04	2.83E+05	1.27E+05	2.25E+05	1.05E+05	5.66E+05	2.54E+05	4.50E+05	2.11E+05		
5		5.47E+04	2.09E+04	4.38E+04	1.92E+04	2.74E+05	1.05E+05	2.19E+05	9.58E+04	5.47E+05	2.09E+05	4.38E+05	1.92E+05		
6		5.35E+04	1.90E+04	4.29E+04	1.82E+04	2.68E+05	9.51E+04	2.15E+05	9.11E+04	5.35E+05	1.90E+05	4.29E+05	1.82E+05		
7		5.26E+04	1.81E+04	4.22E+04	1.77E+04	2.63E+05	9.04E+04	2.11E+05	8.83E+04	5.26E+05	1.81E+05	4.22E+05	1.77E+05		
8		5.18E+04	1.75E+04	4.16E+04	1.73E+04	2.59E+05	8.75E+04	2.08E+05	8.63E+04	5.18E+05	1.75E+05	4.16E+05	1.73E+05		
9		5.10E+04	1.71E+04	4.10E+04	1.69E+04	2.55E+05	8.55E+04	2.05E+05	8.46E+04	5.10E+05	1.71E+05	4.10E+05	1.69E+05		
10		5.03E+04	1.68E+04	4.04E+04	1.66E+04	2.52E+05	8.38E+04	2.02E+05	8.32E+04	5.03E+05	1.68E+05	4.04E+05	1.66E+05		
15		4.72E+04	1.56E+04	3.79E+04	1.55E+04	2.36E+05	7.79E+04	1.89E+05	7.76E+04	4.72E+05	1.56E+05	3.79E+05	1.55E+05		
20		4.41E+04	1.44E+04	3.54E+04	1.44E+04	2.20E+05	7.20E+04	1.77E+05	7.21E+04	4.41E+05	1.44E+05	3.54E+05	1.44E+05		
25		4.16E+04	1.37E+04	3.34E+04	1.37E+04	2.08E+05	6.83E+04	1.67E+05	6.83E+04	4.16E+05	1.37E+05	3.34E+05	1.37E+05		
30		3.92E+04	1.29E+04	3.15E+04	1.29E+04	1.96E+05	6.45E+04	1.57E+05	6.46E+04	3.92E+05	1.29E+05	3.15E+05	1.29E+05		

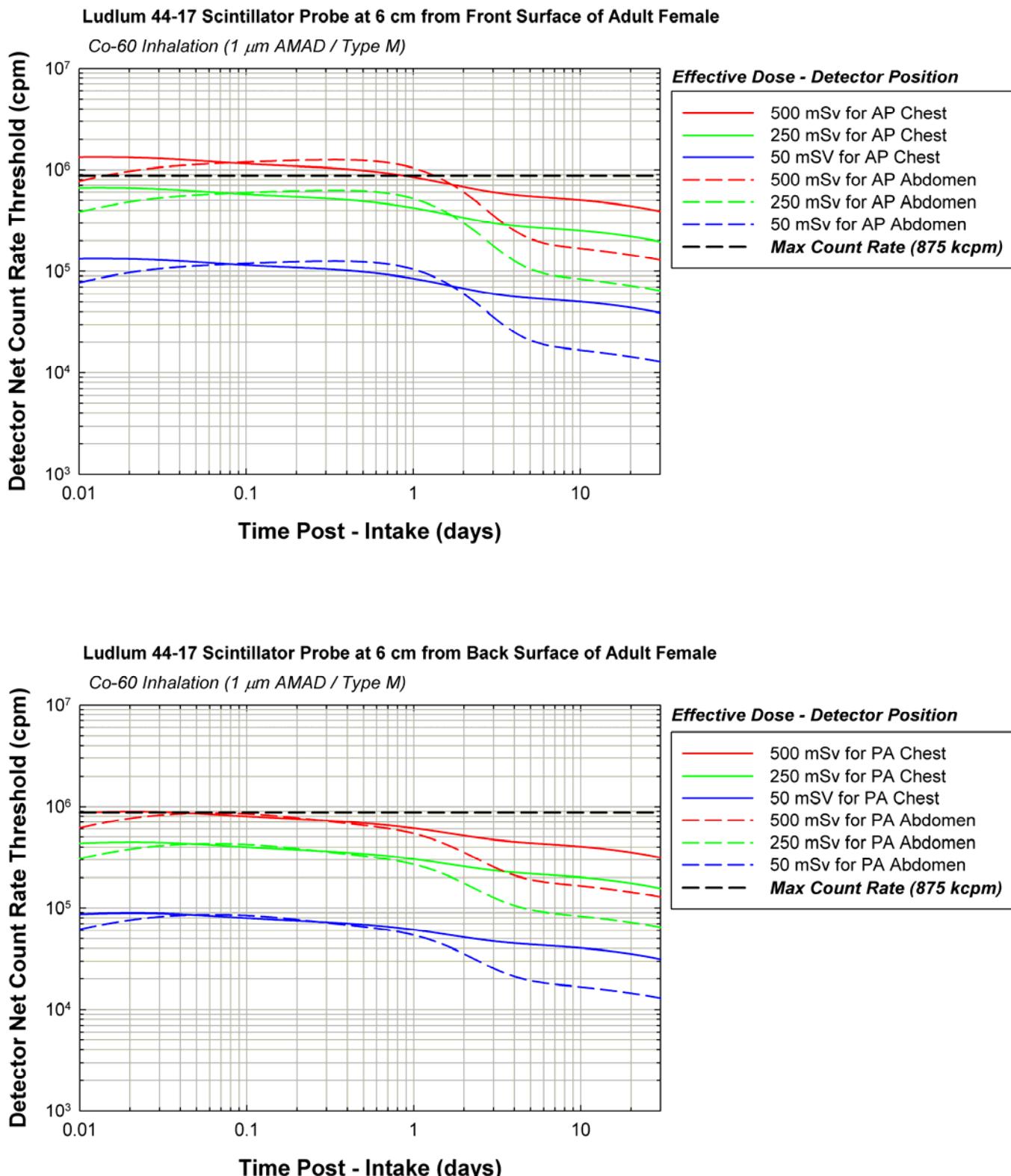
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		4.03E+04	3.41E+04	2.61E+04	2.78E+04	2.02E+05	1.71E+05	1.31E+05	1.39E+05	4.03E+05	3.41E+05	2.61E+05	2.78E+05		
1		3.96E+04	3.63E+04	2.61E+04	2.91E+04	1.98E+05	1.82E+05	1.30E+05	1.46E+05	3.96E+05	3.63E+05	2.61E+05	2.91E+05		
2		3.74E+04	3.69E+04	2.49E+04	2.85E+04	1.87E+05	1.84E+05	1.24E+05	1.43E+05	3.74E+05	3.69E+05	2.49E+05	2.85E+05		
4		3.56E+04	3.66E+04	2.34E+04	2.68E+04	1.78E+05	1.83E+05	1.17E+05	1.34E+05	3.56E+05	3.66E+05	2.34E+05	2.68E+05		
6		3.47E+04	3.61E+04	2.25E+04	2.55E+04	1.73E+05	1.80E+05	1.13E+05	1.27E+05	3.47E+05	3.61E+05	2.25E+05	2.55E+05		
8		3.39E+04	3.55E+04	2.18E+04	2.45E+04	1.69E+05	1.77E+05	1.09E+05	1.23E+05	3.39E+05	3.55E+05	2.18E+05	2.45E+05		
10		3.31E+04	3.47E+04	2.12E+04	2.37E+04	1.65E+05	1.74E+05	1.06E+05	1.19E+05	3.31E+05	3.47E+05	2.12E+05	2.37E+05		
12		3.23E+04	3.39E+04	2.07E+04	2.30E+04	1.61E+05	1.70E+05	1.03E+05	1.15E+05	3.23E+05	3.39E+05	2.07E+05	2.30E+05		
14		3.14E+04	3.30E+04	2.01E+04	2.24E+04	1.57E+05	1.65E+05	1.01E+05	1.12E+05	3.14E+05	3.30E+05	2.01E+05	2.24E+05		
16		3.06E+04	3.21E+04	1.96E+04	2.18E+04	1.53E+05	1.60E+05	9.82E+04	1.09E+05	3.06E+05	3.21E+05	1.96E+05	2.18E+05		
18		2.97E+04	3.11E+04	1.92E+04	2.12E+04	1.48E+05	1.55E+05	9.58E+04	1.06E+05	2.97E+05	3.11E+05	1.92E+05	2.12E+05		
20		2.88E+04	3.01E+04	1.87E+04	2.06E+04	1.44E+05	1.50E+05	9.34E+04	1.03E+05	2.88E+05	3.01E+05	1.87E+05	2.06E+05		
1		2.71E+04	2.80E+04	1.78E+04	1.94E+04	1.36E+05	1.40E+05	8.88E+04	9.70E+04	2.71E+05	2.80E+05	1.78E+05	1.94E+05		
2		1.93E+04	1.78E+04	1.38E+04	1.38E+04	9.67E+04	8.88E+04	6.88E+04	6.91E+04	1.93E+05	1.78E+05	1.38E+05	1.38E+05		
3		1.55E+04	1.25E+04	1.18E+04	1.10E+04	7.75E+04	6.24E+04	5.90E+04	5.48E+04	1.55E+05	1.25E+05	1.18E+05	1.10E+05		
4		1.38E+04	1.02E+04	1.09E+04	9.69E+03	6.89E+04	5.09E+04	5.46E+04	4.84E+04	1.38E+05	1.02E+05	1.09E+05	9.69E+04		
5		1.30E+04	9.20E+03	1.05E+04	9.10E+03	6.50E+04	4.60E+04	5.23E+04	4.55E+04	1.30E+05	9.20E+04	1.05E+05	9.10E+04		
6		1.26E+04	8.73E+03	1.02E+04	8.78E+03	6.29E+04	4.36E+04	5.10E+04	4.39E+04	1.26E+05	8.73E+04	1.02E+05	8.78E+04		
7		1.23E+04	8.46E+03	1.00E+04	8.57E+03	6.15E+04	4.23E+04	5.00E+04	4.29E+04	1.23E+05	8.46E+04	1.00E+05	8.57E+04		
8		1.21E+04	8.27E+03	9.83E+03	8.41E+03	6.04E+04	4.14E+04	4.92E+04	4.20E+04	1.21E+05	8.27E+04	9.83E+04	8.41E+04		
9		1.19E+04	8.12E+03	9.68E+03	8.27E+03	5.94E+04	4.06E+04	4.84E+04	4.13E+04	1.19E+05	8.12E+04	9.68E+04	8.27E+04		
10		1.17E+04	7.99E+03												

**Table D4 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Cobalt-60, Inhalation, 1-μm AMAD Aerosol, Type M, f<sub>A</sub> = 0.10 Ludlum 44-17 Scintillator Probe**

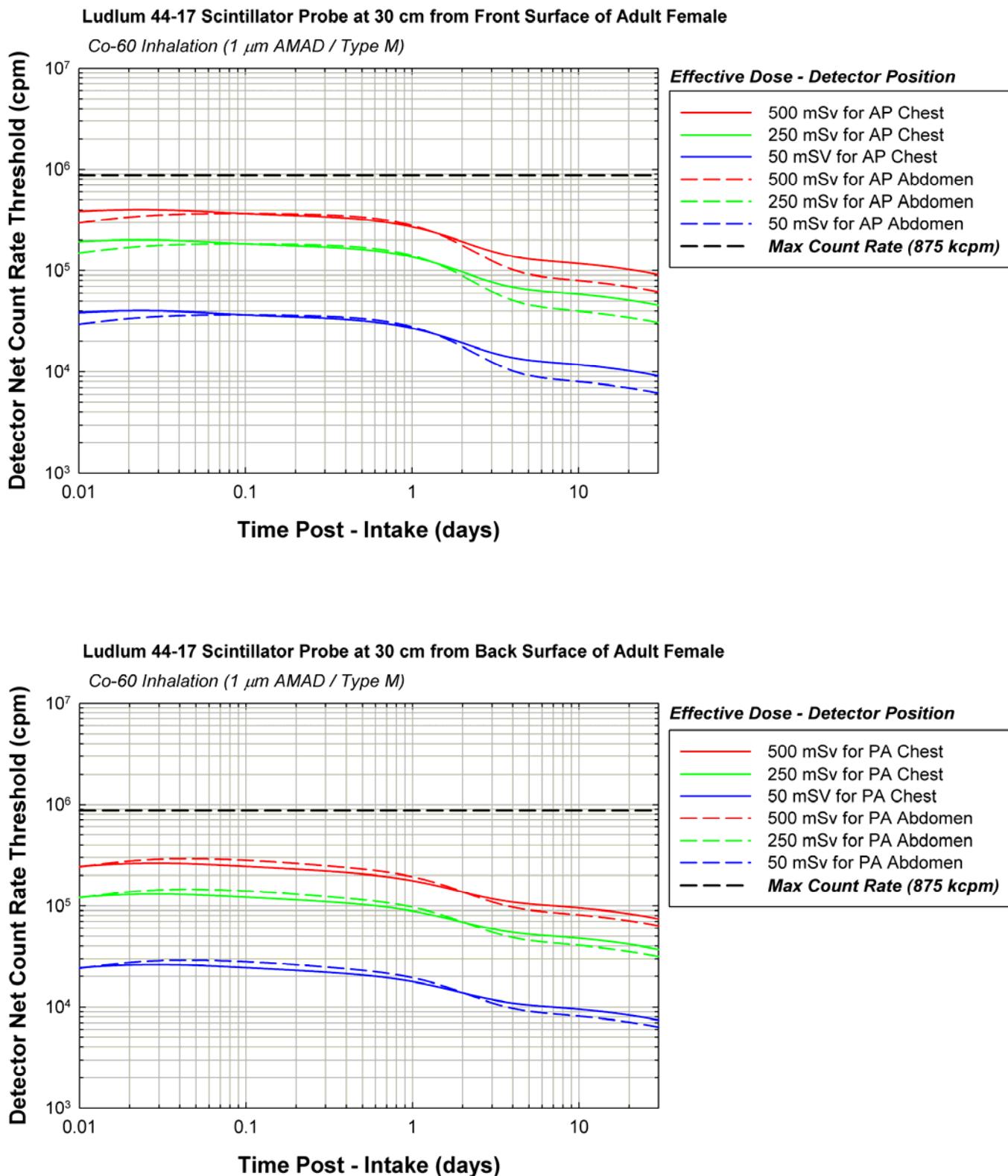
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	7.06E+03	6.50E+03	5.17E+03	5.26E+03	3.53E+04	3.25E+04	2.58E+04	2.63E+04	7.06E+04	6.50E+04	5.17E+04	5.26E+04		
	1	7.02E+03	6.68E+03	5.29E+03	5.40E+03	3.51E+04	3.34E+04	2.64E+04	2.70E+04	7.02E+04	6.68E+04	5.29E+04	5.40E+04		
	2	6.84E+03	6.64E+03	5.12E+03	5.26E+03	3.42E+04	3.32E+04	2.56E+04	2.63E+04	6.84E+04	6.64E+04	5.12E+04	5.26E+04		
	4	6.59E+03	6.54E+03	4.86E+03	4.97E+03	3.29E+04	3.27E+04	2.43E+04	2.49E+04	6.59E+04	6.54E+04	4.86E+04	4.97E+04		
	6	6.40E+03	6.43E+03	4.68E+03	4.78E+03	3.20E+04	3.21E+04	2.34E+04	2.39E+04	6.40E+04	6.43E+04	4.68E+04	4.78E+04		
	8	6.24E+03	6.29E+03	4.53E+03	4.63E+03	3.12E+04	3.15E+04	2.27E+04	2.31E+04	6.24E+04	6.29E+04	4.53E+04	4.63E+04		
	10	6.08E+03	6.13E+03	4.40E+03	4.50E+03	3.04E+04	3.07E+04	2.20E+04	2.25E+04	6.08E+04	6.13E+04	4.40E+04	4.50E+04		
	12	5.92E+03	5.96E+03	4.28E+03	4.39E+03	2.96E+04	2.98E+04	2.14E+04	2.20E+04	5.92E+04	5.96E+04	4.28E+04	4.39E+04		
	14	5.76E+03	5.78E+03	4.15E+03	4.29E+03	2.88E+04	2.89E+04	2.08E+04	2.14E+04	5.76E+04	5.78E+04	4.15E+04	4.29E+04		
	16	5.59E+03	5.60E+03	4.03E+03	4.18E+03	2.80E+04	2.80E+04	2.02E+04	2.09E+04	5.59E+04	5.60E+04	4.03E+04	4.18E+04		
	18	5.42E+03	5.41E+03	3.92E+03	4.08E+03	2.71E+04	2.71E+04	1.96E+04	2.04E+04	5.42E+04	5.41E+04	3.92E+04	4.08E+04		
	20	5.25E+03	5.22E+03	3.80E+03	3.98E+03	2.63E+04	2.61E+04	1.90E+04	1.99E+04	5.25E+04	5.22E+04	3.80E+04	3.98E+04		
1	4.91E+03	4.86E+03	3.58E+03	3.77E+03	2.46E+04	2.43E+04	1.79E+04	1.89E+04	4.91E+04	4.86E+04	3.58E+04	3.77E+04			
2	3.30E+03	3.20E+03	2.57E+03	2.80E+03	1.65E+04	1.60E+04	1.29E+04	1.40E+04	3.30E+04	3.20E+04	2.57E+04	2.80E+04			
3	2.49E+03	2.40E+03	2.08E+03	2.29E+03	1.24E+04	1.20E+04	1.04E+04	1.15E+04	2.49E+04	2.40E+04	2.08E+04	2.29E+04			
4	2.13E+03	2.05E+03	1.86E+03	2.06E+03	1.07E+04	1.03E+04	9.32E+03	1.03E+04	2.13E+04	2.05E+04	1.86E+04	2.06E+04			
5	1.97E+03	1.90E+03	1.76E+03	1.95E+03	9.87E+03	9.49E+03	8.81E+03	9.76E+03	1.97E+04	1.90E+04	1.76E+04	1.95E+04			
6	1.90E+03	1.82E+03	1.71E+03	1.89E+03	9.48E+03	9.10E+03	8.53E+03	9.45E+03	1.90E+04	1.82E+04	1.71E+04	1.89E+04			
7	1.85E+03	1.77E+03	1.67E+03	1.85E+03	9.23E+03	8.86E+03	8.34E+03	9.25E+03	1.85E+04	1.77E+04	1.67E+04	1.85E+04			
8	1.81E+03	1.74E+03	1.64E+03	1.82E+03	9.05E+03	8.69E+03	8.19E+03	9.08E+03	1.81E+04	1.74E+04	1.64E+04	1.82E+04			
9	1.78E+03	1.71E+03	1.61E+03	1.79E+03	8.89E+03	8.53E+03	8.05E+03	8.93E+03	1.78E+04	1.71E+04	1.61E+04	1.79E+04			
10	1.75E+03	1.68E+03	1.59E+03	1.76E+03	8.75E+03	8.39E+03	7.93E+03	8.79E+03	1.75E+04	1.68E+04	1.59E+04	1.76E+04			
15	1.63E+03	1.56E+03	1.48E+03	1.64E+03	8.14E+03	7.80E+03	7.38E+03	8.18E+03	1.63E+04	1.56E+04	1.48E+04	1.64E+04			
20	1.53E+03	1.46E+03	1.38E+03	1.53E+03	7.63E+03	7.31E+03	6.92E+03	7.66E+03	1.53E+04	1.46E+04	1.38E+04	1.53E+04			
25	1.44E+03	1.38E+03	1.31E+03	1.45E+03	7.21E+03	6.91E+03	6.54E+03	7.25E+03	1.44E+04	1.38E+04	1.31E+04	1.45E+04			
30	1.36E+03	1.30E+03	1.23E+03	1.37E+03	6.80E+03	6.52E+03	6.17E+03	6.84E+03	1.36E+04	1.30E+04	1.23E+04	1.37E+04			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	2.09E+03	2.09E+03	1.63E+03	1.63E+03	1.05E+04	1.05E+04	8.14E+03	8.14E+03	2.09E+04	2.09E+04	1.63E+04	1.63E+04		
	1	2.09E+03	2.09E+03	1.67E+03	1.67E+03	1.04E+04	1.04E+04	8.37E+03	8.37E+03	2.09E+04	2.09E+04	1.67E+04	1.67E+04		
	2	2.06E+03	2.06E+03	1.64E+03	1.64E+03	1.03E+04	1.03E+04	8.21E+03	8.21E+03	2.06E+04	2.06E+04	1.64E+04	1.64E+04		
	4	2.00E+03	2.00E+03	1.55E+03	1.55E+03	1.00E+04	1.00E+04	7.77E+03	7.77E+03	2.00E+04	2.00E+04	1.55E+04	1.55E+04		
	6	1.95E+03	1.95E+03	1.48E+03	1.48E+03	9.73E+03	9.73E+03	7.41E+03	7.41E+03	1.95E+04	1.95E+04	1.48E+04	1.48E+04		
	8	1.90E+03	1.90E+03	1.43E+03	1.43E+03	9.49E+03	9.49E+03	7.13E+03	7.13E+03	1.90E+04	1.90E+04	1.43E+04	1.43E+04		
	10	1.85E+03	1.85E+03	1.38E+03	1.38E+03	9.25E+03	9.25E+03	6.89E+03	6.89E+03	1.85E+04	1.85E+04	1.38E+04	1.38E+04		
	12	1.80E+03	1.80E+03	1.34E+03	1.34E+03	9.02E+03	9.02E+03	6.68E+03	6.68E+03	1.80E+04	1.80E+04	1.34E+04	1.34E+04		
	14	1.76E+03	1.76E+03	1.30E+03	1.30E+03	8.78E+03	8.78E+03	6.48E+03	6.48E+03	1.76E+04	1.76E+04	1.30E+04	1.30E+04		
	16	1.71E+03	1.71E+03	1.26E+03	1.26E+03	8.54E+03	8.54E+03	6.29E+03	6.29E+03	1.71E+04	1.71E+04	1.26E+04	1.26E+04		
	18	1.66E+03	1.66E+03	1.22E+03	1.22E+03	8.29E+03	8.29E+03	6.11E+03	6.11E+03	1.66E+04	1.66E+04	1.22E+04	1.22E+04		
	20	1.61E+03	1.61E+03	1.19E+03	1.19E+03	8.04E+03	8.04E+03	5.94E+03	5.94E+03	1.61E+04	1.61E+04	1.19E+04	1.19E+04		
1	1.51E+03	1.51E+03	1.12E+03	1.12E+03	7.54E+03	7.54E+03	5.60E+03	5.60E+03	1.51E+04	1.51E+04	1.12E+04	1.12E+04			
2	1.02E+03	1.02E+03	8.25E+02	8.25E+02	5.08E+03	5.08E+03	4.12E+03	4.12E+03	1.02E+04	1.02E+04	8.25E+03	8.25E+03			
3	7.65E+02	7.65E+02	6.81E+02	6.81E+02	3.83E+03	3.83E+03	3.41E+03	3.41E+03	7.65E+03	7.65E+03	6.81E+03	6.81E+03			
4	6.55E+02	6.55E+02	6.17E+02	6.17E+02	3.27E+03	3.27E+03	3.08E+03	3.08E+03	6.55E+03	6.55E+03	6.17E+03	6.17E+03			
5	6.06E+02	6.06E+02	5.86E+02	5.86E+02	3.03E+03	3.03E+03	2.93E+03	2.93E+03	6.06E+03	6.06E+03	5.86E+03	5.86E+03			
6	5.81E+02	5.81E+02	5.69E+02	5.69E+02	2.91E+03	2.91E+03	2.84E+03	2.84E+03	5.81E+03	5.81E+03	5.69E+03	5.69E+03			
7	5.66E+02	5.66E+02	5.56E+02	5.56E+02	2.83E+03	2.83E+03	2.78E+03	2.78E+03	5.66E+03	5.66E+03	5.56E+03	5.56E+03			
8	5.55E+02	5.55E+02	5.46E+02	5.46E+02	2.77E+03	2.77E+03	2.73E+03	2.73E+03	5.55E+03	5.55E+03	5.46E+03	5.46E+03			
9	5.45E+02	5.45E+02	5.38E+02	5.38E+02	2.73E+03	2.73E+03	2.69E+03	2.69E+03	5.45E+03	5.45E+03	5.38E+03	5.38E+03			
10	5.37E+02	5.37E+02	5.29E+02	5.29E+02	2.68E+03	2.68E+03	2.65E+03	2.65E+03	5.37E+03						

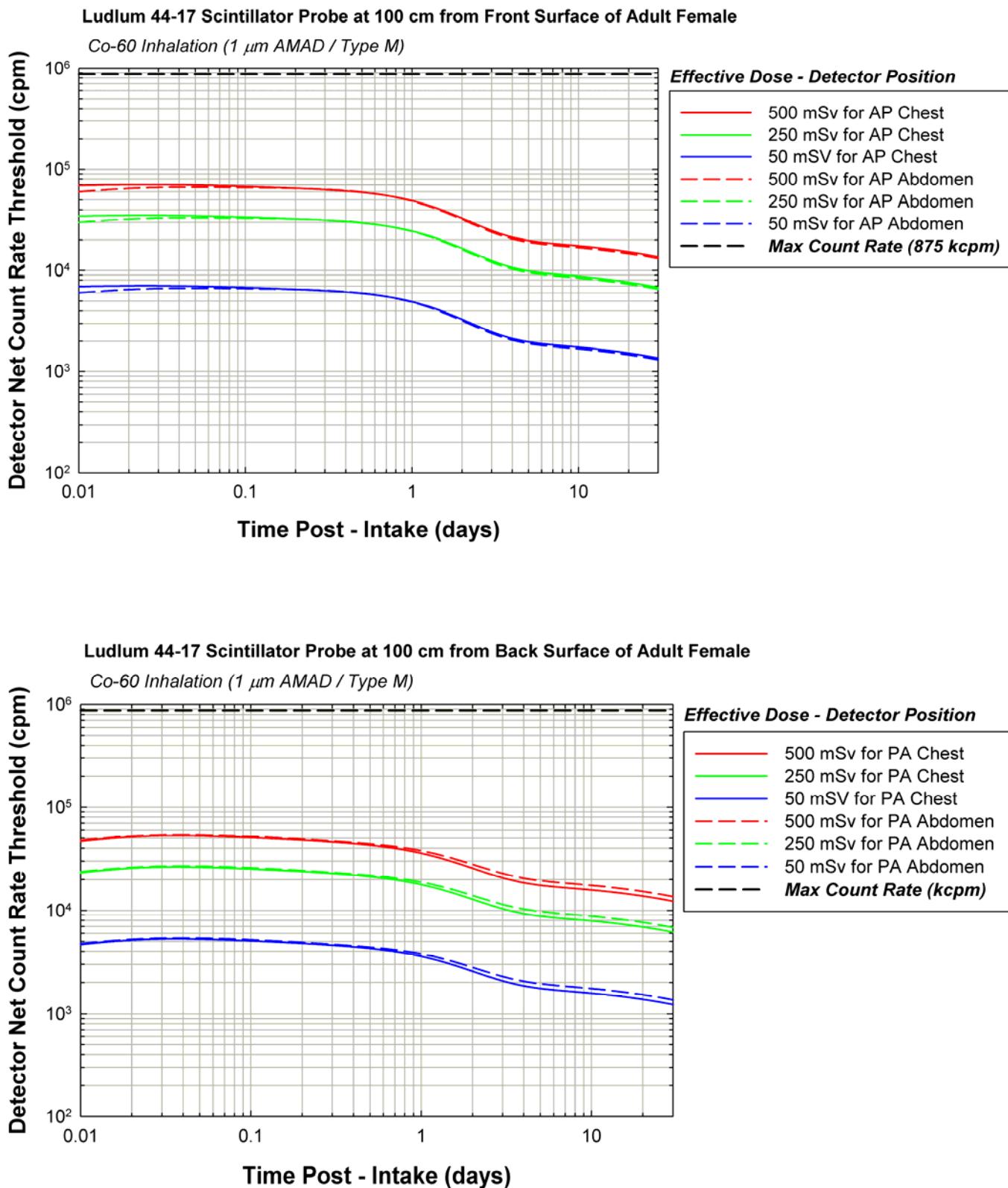
**Table D4** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
**Cobalt-60, Inhalation, 1- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.10$  Ludlum 44-17 Scintillator Probe**



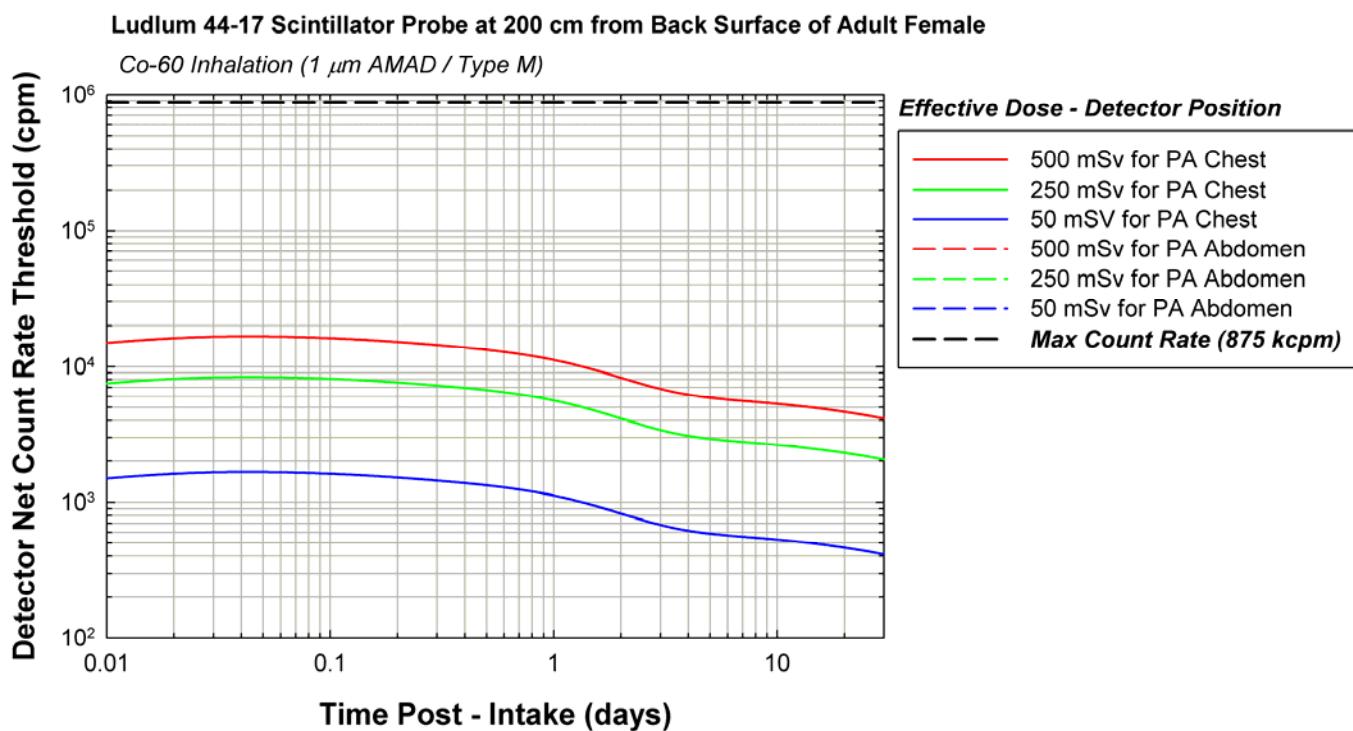
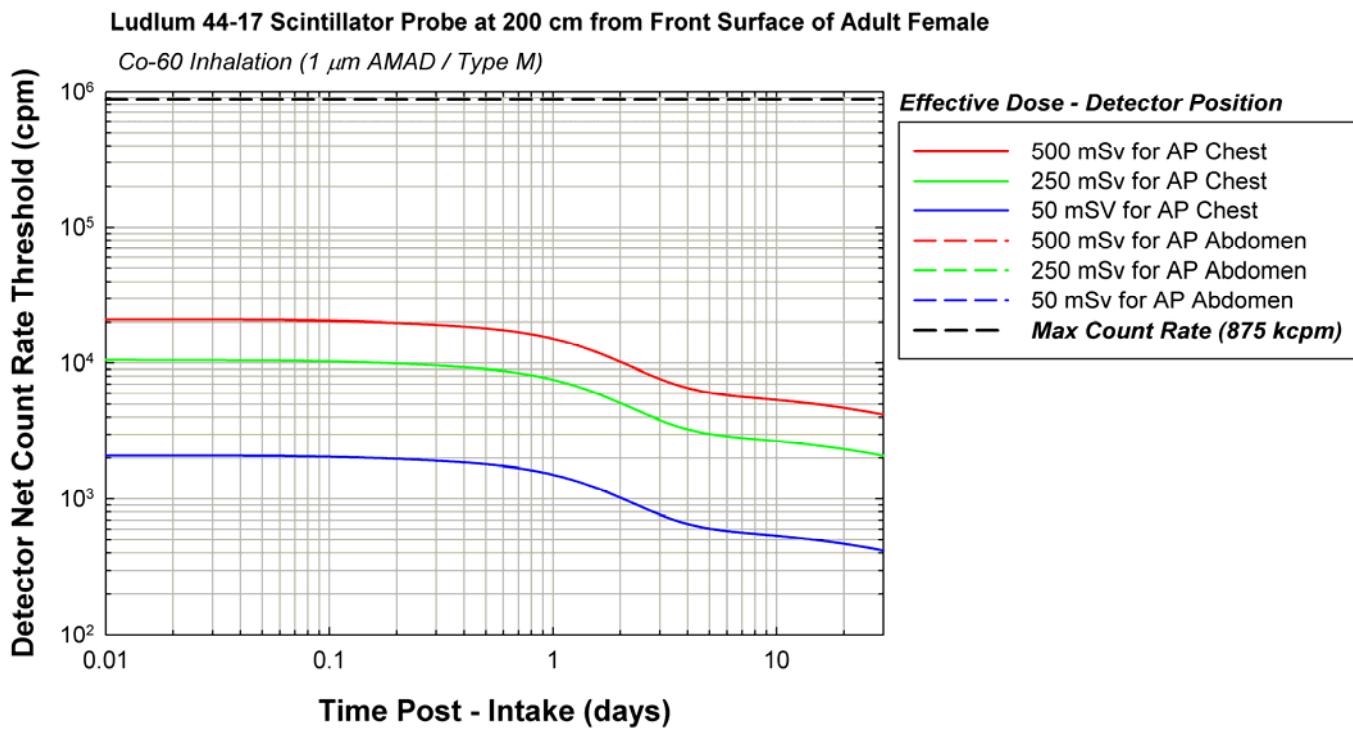
**Table D4 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 1- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.10$  **Ludlum 44-17 Scintillator Probe****



**Table D4** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
**Cobalt-60, Inhalation, 1- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.10$  Ludlum 44-17 Scintillator Probe**



**Table D4 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 1- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.10$  **Ludlum 44-17 Scintillator Probe****



**Table D5 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Cobalt-60, Inhalation, 1-μm AMAD Aerosol, Type S, f<sub>A</sub> = 0.05 Ludlum 44-17 Scintillator Probe**

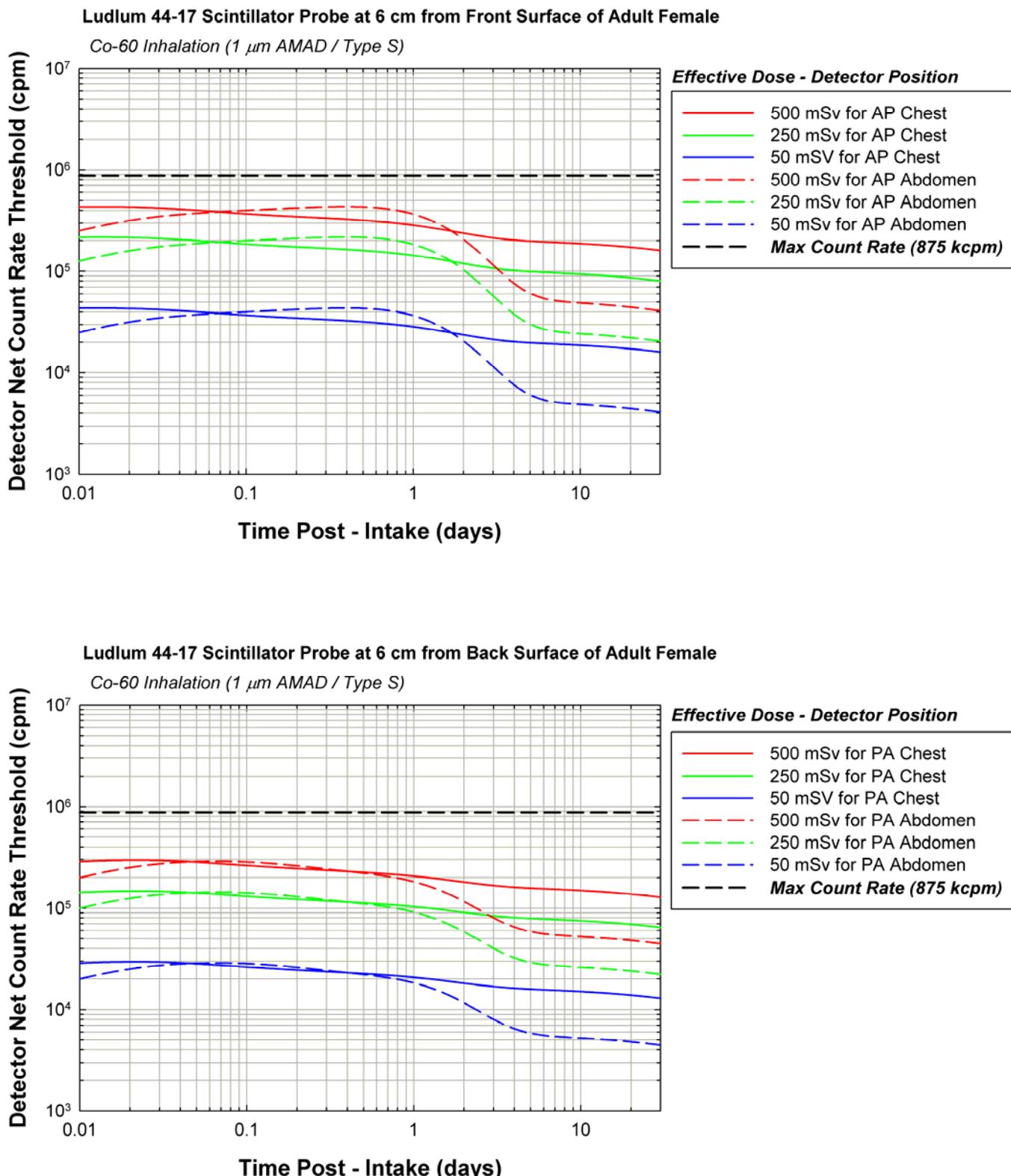
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED								Net Count Rate (cpm) for 250 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen
	0.5	4.32E+04	3.21E+04	2.96E+04	2.53E+04	2.16E+05	1.61E+05	1.48E+05	1.27E+05	4.32E+05	3.21E+05	2.96E+05	2.53E+05		
	1	4.10E+04	3.66E+04	2.88E+04	2.83E+04	2.05E+05	1.83E+05	1.44E+05	1.42E+05	4.10E+05	3.66E+05	2.88E+05	2.83E+05		
	2	3.78E+04	3.94E+04	2.68E+04	2.87E+04	1.89E+05	1.97E+05	1.34E+05	1.44E+05	3.78E+05	3.94E+05	2.68E+05	2.87E+05		
	4	3.53E+04	4.17E+04	2.50E+04	2.68E+04	1.76E+05	2.09E+05	1.25E+05	1.34E+05	3.53E+05	4.17E+05	2.50E+05	2.68E+05		
	6	3.41E+04	4.29E+04	2.40E+04	2.51E+04	1.71E+05	2.15E+05	1.20E+05	1.25E+05	3.41E+05	4.29E+05	2.40E+05	2.51E+05		
	8	3.33E+04	4.35E+04	2.34E+04	2.38E+04	1.67E+05	2.17E+05	1.17E+05	1.19E+05	3.33E+05	4.35E+05	2.34E+05	2.38E+05		
	10	3.26E+04	4.36E+04	2.30E+04	2.29E+04	1.63E+05	2.18E+05	1.15E+05	1.14E+05	3.26E+05	4.36E+05	2.30E+05	2.29E+05		
	12	3.20E+04	4.33E+04	2.26E+04	2.21E+04	1.60E+05	2.17E+05	1.13E+05	1.11E+05	3.20E+05	4.33E+05	2.26E+05	2.21E+05		
	14	3.14E+04	4.27E+04	2.22E+04	2.15E+04	1.57E+05	2.13E+05	1.11E+05	1.07E+05	3.14E+05	4.27E+05	2.22E+05	2.15E+05		
	16	3.08E+04	4.18E+04	2.19E+04	2.08E+04	1.54E+05	2.09E+05	1.10E+05	1.04E+05	3.08E+05	4.18E+05	2.19E+05	2.08E+05		
	18	3.02E+04	4.07E+04	2.16E+04	2.02E+04	1.51E+05	2.04E+05	1.08E+05	1.01E+05	3.02E+05	4.07E+05	2.16E+05	2.02E+05		
	20	2.97E+04	3.95E+04	2.13E+04	1.96E+04	1.48E+05	1.97E+05	1.07E+05	9.78E+04	2.97E+05	3.95E+05	2.13E+05	1.96E+05		
1	2.86E+04	3.67E+04	2.07E+04	1.83E+04	1.43E+05	1.84E+05	1.04E+05	9.14E+04	2.86E+05	3.67E+05	2.07E+05	1.83E+05			
2	2.38E+04	2.05E+04	1.81E+04	1.16E+04	1.19E+05	1.03E+05	9.07E+04	5.80E+04	2.38E+05	2.05E+05	1.81E+05	1.16E+05			
3	2.14E+04	1.15E+04	1.68E+04	8.03E+03	1.07E+05	5.75E+04	8.40E+04	4.01E+04	2.14E+05	1.15E+05	1.68E+05	8.03E+04			
4	2.03E+04	7.61E+03	1.62E+04	6.48E+03	1.02E+05	3.81E+04	8.08E+04	3.24E+04	2.03E+05	7.61E+04	1.62E+05	6.48E+04			
5	1.98E+04	6.05E+03	1.58E+04	5.84E+03	9.90E+04	3.02E+04	7.91E+04	2.92E+04	1.98E+05	6.05E+04	1.58E+05	5.84E+04			
6	1.95E+04	5.42E+03	1.56E+04	5.56E+03	9.74E+04	2.71E+04	7.80E+04	2.78E+04	1.95E+05	5.42E+04	1.56E+05	5.56E+04			
7	1.93E+04	5.16E+03	1.54E+04	5.43E+03	9.63E+04	2.58E+04	7.72E+04	2.71E+04	1.93E+05	5.16E+04	1.54E+05	5.43E+04			
8	1.91E+04	5.02E+03	1.53E+04	5.34E+03	9.54E+04	2.51E+04	7.64E+04	2.67E+04	1.91E+05	5.02E+04	1.53E+05	5.34E+04			
9	1.89E+04	4.94E+03	1.51E+04	5.28E+03	9.45E+04	2.47E+04	7.57E+04	2.64E+04	1.89E+05	4.94E+04	1.51E+05	5.28E+04			
10	1.87E+04	4.88E+03	1.50E+04	5.23E+03	9.36E+04	2.44E+04	7.50E+04	2.61E+04	1.87E+05	4.88E+04	1.50E+05	5.23E+04			
15	1.80E+04	4.66E+03	1.44E+04	5.01E+03	9.00E+04	2.33E+04	7.21E+04	2.51E+04	1.80E+05	4.66E+04	1.44E+05	5.01E+04			
20	1.73E+04	4.45E+03	1.38E+04	4.79E+03	8.63E+04	2.22E+04	6.91E+04	2.40E+04	1.73E+05	4.45E+04	1.38E+05	4.79E+04			
25	1.67E+04	4.28E+03	1.34E+04	4.62E+03	8.33E+04	2.14E+04	6.68E+04	2.31E+04	1.67E+05	4.28E+04	1.34E+05	4.62E+04			
30	1.61E+04	4.11E+03	1.29E+04	4.45E+03	8.03E+04	2.05E+04	6.44E+04	2.22E+04	1.61E+05	4.11E+04	1.29E+05	4.45E+04			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED								Net Count Rate (cpm) for 250 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen
	0.5	1.33E+04	1.12E+04	8.64E+03	9.16E+03	6.64E+04	5.61E+04	4.32E+04	4.58E+04	1.33E+05	1.12E+05	8.64E+04	9.16E+04		
	1	1.30E+04	1.20E+04	8.65E+03	9.67E+03	6.52E+04	6.01E+04	4.32E+04	4.83E+04	1.30E+05	1.20E+05	8.65E+04	9.67E+04		
	2	1.23E+04	1.23E+04	8.22E+03	9.48E+03	6.14E+04	6.14E+04	4.11E+04	4.74E+04	1.23E+05	1.23E+05	8.22E+04	9.48E+04		
	4	1.17E+04	1.23E+04	7.70E+03	8.92E+03	5.84E+04	6.16E+04	3.85E+04	4.46E+04	1.17E+05	1.23E+05	7.70E+04	8.92E+04		
	6	1.14E+04	1.22E+04	7.41E+03	8.50E+03	5.70E+04	6.11E+04	3.70E+04	4.25E+04	1.14E+05	1.22E+05	7.41E+04	8.50E+04		
	8	1.12E+04	1.21E+04	7.19E+03	8.19E+03	5.59E+04	6.04E+04	3.59E+04	4.09E+04	1.12E+05	1.21E+05	7.19E+04	8.19E+04		
	10	1.10E+04	1.19E+04	7.01E+03	7.94E+03	5.48E+04	5.94E+04	3.50E+04	3.97E+04	1.10E+05	1.19E+05	7.01E+04	7.94E+04		
	12	1.07E+04	1.17E+04	6.85E+03	7.72E+03	5.37E+04	5.83E+04	3.42E+04	3.86E+04	1.07E+05	1.17E+05	6.85E+04	7.72E+04		
	14	1.05E+04	1.14E+04	6.70E+03	7.53E+03	5.25E+04	5.69E+04	3.35E+04	3.76E+04	1.05E+05	1.14E+05	6.70E+04	7.53E+04		
	16	1.03E+04	1.11E+04	6.55E+03	7.33E+03	5.13E+04	5.54E+04	3.28E+04	3.67E+04	1.03E+05	1.11E+05	6.55E+04	7.33E+04		
	18	1.00E+04	1.08E+04	6.41E+03	7.14E+03	5.01E+04	5.38E+04	3.21E+04	3.57E+04	1.00E+05	1.08E+05	6.41E+04	7.14E+04		
	20	9.76E+03	1.04E+04	6.27E+03	6.95E+03	4.88E+04	5.21E+04	3.14E+04	3.47E+04	9.76E+04	1.04E+05	6.27E+04	6.95E+04		
1	9.24E+03	9.72E+03	6.00E+03	6.56E+03	4.62E+04	4.86E+04	3.00E+04	3.28E+04	9.24E+04	9.72E+04	6.00E+04	6.56E+04			
2	6.66E+03	6.06E+03	4.71E+03	4.63E+03	3.33E+04	3.03E+04	2.35E+04	2.32E+04	6.66E+04	6.06E+04	4.71E+04	4.63E+04			
3	5.33E+03	4.15E+03	4.05E+03	3.62E+03	2.67E+04	2.07E+04	2.03E+04	1.81E+04	5.33E+04	4.15E+04	4.05E+04	3.62E+04			
4	4.75E+03	3.33E+03	3.76E+03	3.19E+03	2.38E+04	1.66E+04	1.88E+04	1.59E+04	4.75E+04	3.33E+04	3.76E+04	3.19E+04			
5	4.50E+03	2.99E+03	3.63E+03	3.00E+03	2.25E+04	1.50E+04	1.81E+04	1.50E+04	4.50E+04	2.99E+04	3.63E+04	3.00E+04			
6	4.38E+03	2.85E+03	3.56E+03	2.91E+03	2.19E+04	1.42E+04	1.78E+04	1.45E+04	4.38E+04	2.85E+04	3.56E+04	2.91E+04			
7	4.31E+03	2.78E+03	3.51E+03	2.86E+03	2.16E+04	1.39E+04	1.76E+04	1.43E+04	4.31E+04	2.78E+04	3.51E+04	2.86E+04			
8	4.26E+03	2.73E+03	3.47E+03	2.83E+03	2.13E+04	1.37E+04	1.74E+04	1.41E+04	4.26E+04	2.73E+04	3.47E+04	2.83E+04			
9	4.22E+03	2.70E+03	3.44E+03	2.80E+03	2.11E+04	1.35E+04	1.72E+04	1.40E+04	4.22E+04	2.70E+04	3.44E+04	2.80E+04			
10	4.18E+03	2.68E+03	3.41E+03	2.77E+03	2.09E+04	1.34E+04	1.71E+04	1.39E+04	4.18E+04	2.68E+04	3.41E+04	2.77E+04			
15	4.02E+03	2.57E+03	3.28E+03	2.66E+03	2.01E+04	1.28E+04	1.64E+04	1.33E+04	4.02E+04	2.57E+04	3.28E+04	2.66E+04			
20	3.85E+03	2.45E+03	3.14E+03	2.46E+03	1.92E+04	1.23E+04	1.57E+04	1.27E+04	3.85E+04	2.45E+04	3.14E+04	2.55E+04			
25	3.71E+03	2.37E+03	3.03E+03	2.46E+03	1.86E+04	1.18E+04	1.52E+04	1.23E+04	3.71E+04	2.37E+04	3.03E+04	2.46E+04			
30	3.58E+03	2.28E+03	2.92E+03	2.37E+03	1.79E+04	1.14E+04	1.46E+04	1.18E+04	3.58E+04	2.28E+04	2.92E+04	2.37E+04			

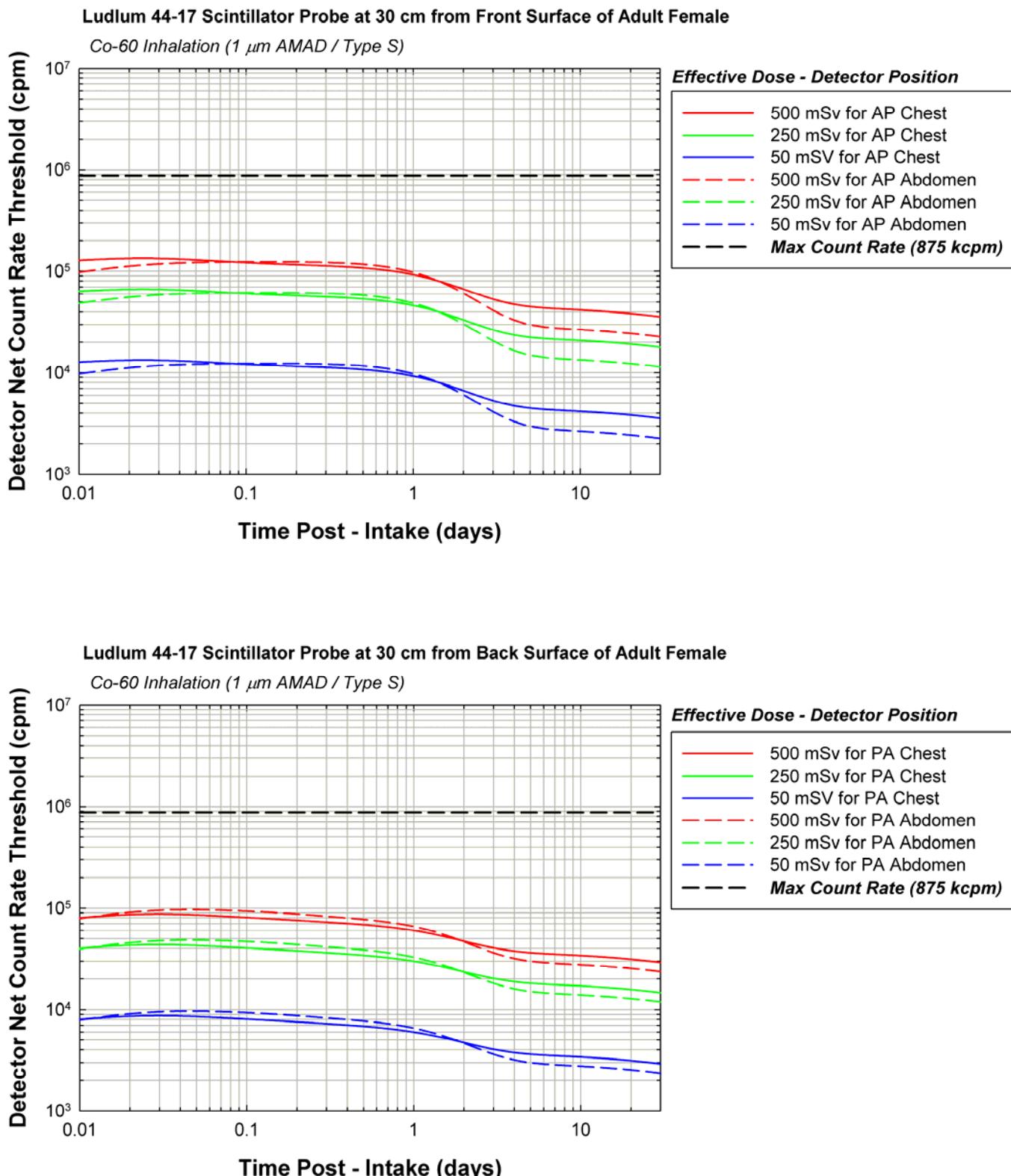
**Table D5 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 1-μm AMAD Aerosol, Type S, f<sub>A</sub> = 0.05 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		2.34E+03	2.14E+03	1.70E+03	1.74E+03	1.17E+04	1.07E+04	8.50E+03	8.72E+03	2.34E+04	2.14E+04	1.70E+04	1.74E+04		
1		2.33E+03	2.20E+03	1.75E+03	1.80E+03	1.17E+04	1.10E+04	8.73E+03	9.00E+03	2.33E+04	2.20E+04	1.75E+04	1.80E+04		
2		2.27E+03	2.19E+03	1.69E+03	1.75E+03	1.14E+04	1.10E+04	8.45E+03	8.76E+03	2.27E+04	2.19E+04	1.69E+04	1.75E+04		
4		2.20E+03	2.17E+03	1.60E+03	1.66E+03	1.10E+04	1.09E+04	8.02E+03	8.28E+03	2.20E+04	2.17E+04	1.60E+04	1.66E+04		
6		2.14E+03	2.14E+03	1.55E+03	1.59E+03	1.07E+04	1.07E+04	7.73E+03	7.95E+03	2.14E+04	2.14E+04	1.55E+04	1.59E+04		
8		2.10E+03	2.11E+03	1.50E+03	1.54E+03	1.05E+04	1.05E+04	7.50E+03	7.72E+03	2.10E+04	2.11E+04	1.50E+04	1.54E+04		
10		2.05E+03	2.06E+03	1.46E+03	1.50E+03	1.03E+04	1.03E+04	7.30E+03	7.52E+03	2.05E+04	2.06E+04	1.46E+04	1.50E+04		
12		2.00E+03	2.01E+03	1.42E+03	1.47E+03	1.00E+04	1.01E+04	7.11E+03	7.35E+03	2.00E+04	2.01E+04	1.42E+04	1.47E+04		
14		1.95E+03	1.96E+03	1.39E+03	1.44E+03	9.77E+03	9.79E+03	6.93E+03	7.19E+03	1.95E+04	1.96E+04	1.39E+04	1.44E+04		
16		1.90E+03	1.90E+03	1.35E+03	1.40E+03	9.51E+03	9.49E+03	6.75E+03	7.02E+03	1.90E+04	1.90E+04	1.35E+04	1.40E+04		
18		1.85E+03	1.84E+03	1.31E+03	1.37E+03	9.24E+03	9.19E+03	6.57E+03	6.86E+03	1.85E+04	1.84E+04	1.31E+04	1.37E+04		
20		1.79E+03	1.78E+03	1.28E+03	1.34E+03	8.96E+03	8.89E+03	6.39E+03	6.70E+03	1.79E+04	1.78E+04	1.28E+04	1.34E+04		
1		1.68E+03	1.66E+03	1.21E+03	1.27E+03	8.40E+03	8.28E+03	6.03E+03	6.37E+03	1.68E+04	1.66E+04	1.21E+04	1.27E+04		
2		1.12E+03	1.08E+03	8.69E+02	9.38E+02	5.61E+03	5.39E+03	4.35E+03	4.69E+03	1.12E+04	1.08E+04	8.69E+03	9.38E+03		
3		8.33E+02	7.93E+02	6.99E+02	7.62E+02	4.17E+03	3.96E+03	3.50E+03	3.81E+03	8.33E+03	7.93E+03	6.99E+03	7.62E+03		
4		7.09E+02	6.72E+02	6.26E+02	6.84E+02	3.55E+03	3.36E+03	3.13E+03	3.42E+03	7.09E+03	6.72E+03	6.26E+03	6.84E+03		
5		6.57E+02	6.21E+02	5.94E+02	6.50E+02	3.29E+03	3.11E+03	2.97E+03	3.25E+03	6.57E+03	6.21E+03	5.94E+03	6.50E+03		
6		6.34E+02	5.99E+02	5.78E+02	6.34E+02	3.17E+03	2.99E+03	2.89E+03	3.17E+03	6.34E+03	5.99E+03	5.78E+03	6.34E+03		
7		6.22E+02	5.87E+02	5.69E+02	6.24E+02	3.11E+03	2.93E+03	2.85E+03	3.12E+03	6.22E+03	5.87E+03	5.69E+03	6.24E+03		
8		6.13E+02	5.79E+02	5.63E+02	6.17E+02	3.07E+03	2.90E+03	2.81E+03	3.08E+03	6.13E+03	5.79E+03	5.63E+03	6.17E+03		
9		6.07E+02	5.73E+02	5.57E+02	6.10E+02	3.03E+03	2.86E+03	2.78E+03	3.05E+03	6.07E+03	5.73E+03	5.57E+03	6.10E+03		
10		6.01E+02	5.67E+02	5.52E+02	6.05E+02	3.01E+03	2.84E+03	2.76E+03	3.02E+03	6.01E+03	5.67E+03	5.52E+03	6.05E+03		
15		5.75E+02	5.43E+02	5.28E+02	5.79E+02	2.88E+03	2.71E+03	2.64E+03	2.90E+03	5.75E+03	5.43E+03	5.28E+03	5.79E+03		
20		5.52E+02	5.21E+02	5.08E+02	5.56E+02	2.76E+03	2.61E+03	2.54E+03	2.78E+03	5.52E+03	5.21E+03	5.08E+03	5.56E+03		
25		5.33E+02	5.03E+02	4.90E+02	5.37E+02	2.67E+03	2.51E+03	2.45E+03	2.68E+03	5.33E+03	5.03E+03	4.90E+03	5.37E+03		
30		5.14E+02	4.84E+02	4.72E+02	5.17E+02	2.57E+03	2.42E+03	2.36E+03	2.59E+03	5.14E+03	4.84E+03	4.72E+03	5.17E+03		
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		6.93E+02	6.93E+02	5.42E+02	5.42E+02	3.46E+03	3.46E+03	2.71E+03	2.71E+03	6.93E+03	6.93E+03	5.42E+03	5.42E+03		
1		6.91E+02	6.91E+02	5.60E+02	5.60E+02	3.46E+03	3.46E+03	2.80E+03	2.80E+03	6.91E+03	6.91E+03	5.60E+03	5.60E+03		
2		6.84E+02	6.84E+02	5.51E+02	5.51E+02	3.42E+03	3.42E+03	2.75E+03	2.75E+03	6.84E+03	6.84E+03	5.51E+03	5.51E+03		
4		6.66E+02	6.66E+02	5.22E+02	5.22E+02	3.33E+03	3.33E+03	2.61E+03	2.61E+03	6.66E+03	6.66E+03	5.22E+03	5.22E+03		
6		6.50E+02	6.50E+02	4.98E+02	4.98E+02	3.25E+03	3.25E+03	2.49E+03	2.49E+03	6.50E+03	6.50E+03	4.98E+03	4.98E+03		
8		6.36E+02	6.36E+02	4.80E+02	4.80E+02	3.18E+03	3.18E+03	2.40E+03	2.40E+03	6.36E+03	6.36E+03	4.80E+03	4.80E+03		
10		6.23E+02	6.23E+02	4.64E+02	4.64E+02	3.11E+03	3.11E+03	2.32E+03	2.32E+03	6.23E+03	6.23E+03	4.64E+03	4.64E+03		
12		6.10E+02	6.10E+02	4.51E+02	4.51E+02	3.05E+03	3.05E+03	2.25E+03	2.25E+03	6.10E+03	6.10E+03	4.51E+03	4.51E+03		
14		5.95E+02	5.95E+02	4.38E+02	4.38E+02	2.98E+03	2.98E+03	2.19E+03	2.19E+03	5.95E+03	5.95E+03	4.38E+03	4.38E+03		
16		5.81E+02	5.81E+02	4.26E+02	4.26E+02	2.90E+03	2.90E+03	2.13E+03	2.13E+03	5.81E+03	5.81E+03	4.26E+03	4.26E+03		
18		5.65E+02	5.65E+02	4.14E+02	4.14E+02	2.83E+03	2.83E+03	2.07E+03	2.07E+03	5.65E+03	5.65E+03	4.14E+03	4.14E+03		
20		5.49E+02	5.49E+02	4.02E+02	4.02E+02	2.75E+03	2.75E+03	2.01E+03	2.01E+03	5.49E+03	5.49E+03	4.02E+03	4.02E+03		
1		5.16E+02	5.16E+02	3.80E+02	3.80E+02	2.58E+03	2.58E+03	1.90E+03	1.90E+03	5.16E+03	5.16E+03	3.80E+03	3.80E+03		
2		3.47E+02	3.47E+02	2.79E+02	2.79E+02	1.73E+03	1.73E+03	1.39E+03	1.39E+03	3.47E+03	3.47E+03	2.79E+03	2.79E+03		
3		2.58E+02	2.58E+02	2.29E+02	2.29E+02	1.29E+03	1.29E+03	1.14E+03	1.14E+03	2.58E+03	2.58E+03	2.29E+03	2.29E+03		
4		2.19E+02	2.19E+02	2.07E+02	2.07E+02	1.10E+03	1.10E+03	1.03E+03	1.03E+03	2.19E+03	2.19E+03	2.07E+03	2.07E+03		
5		2.03E+02	2.03E+02	1.97E+02	1.97E+02	1.02E+03	1.02E+03	9.87E+02	9.87E+02	2.03E+03	2.03E+03	1.97E+03	1.97E+03		
6		1.96E+02	1.96E+02	1.93E+02	1.93E+02	9.79E+02	9.79E+02	9.64E+02	9.64E+02	1.96E+03	1.96E+03	1.93E+03	1.93E+03		
7		1.92E+02	1.92E+02	1.90E+02	1.90E+02	9.60E+02	9.60E+02	9.50E+02	9.50E+02	1.92E+03	1.92E+03	1.90E+03	1.90E+03		
8		1.89E+02	1.89E+02	1.88E+02	1.88E+02	9.47E+02	9.47E+02	9.39E+02	9.39E+02	1.89E+03	1.89E+03	1.88E+03	1.88E+03		
9		1.87E+02	1.87E+02	1.86E+02	1.86E+02	9.37E+02	9.37E+02	9.30E+02	9.30E+02	1.87E+03	1.87E+03	1.86E+03	1.86E+03		
10		1.86E+02	1.86E+02	1.84E+02	1.84E+02	9.28E+02	9.28E+02	9.21E+02	9.21E+02	1.86E+03	1.86E+03	1.84E+03	1.84E+03		
15		1.78E+02	1.78E+02	1.76E+02	1.76E+02	8.88E+02	8.88E+02	8.82E+02	8.82E+02	1.78E+03	1.78E+03	1.76E+03	1.76E+03		
20		1.71E+02	1.71E+02	1.69E+02	1.69E+02	8.53E+02	8.53E+02	8.47E+02	8.47E+02	1.71E+03	1.71E+03	1.69E+03	1.69E+03		

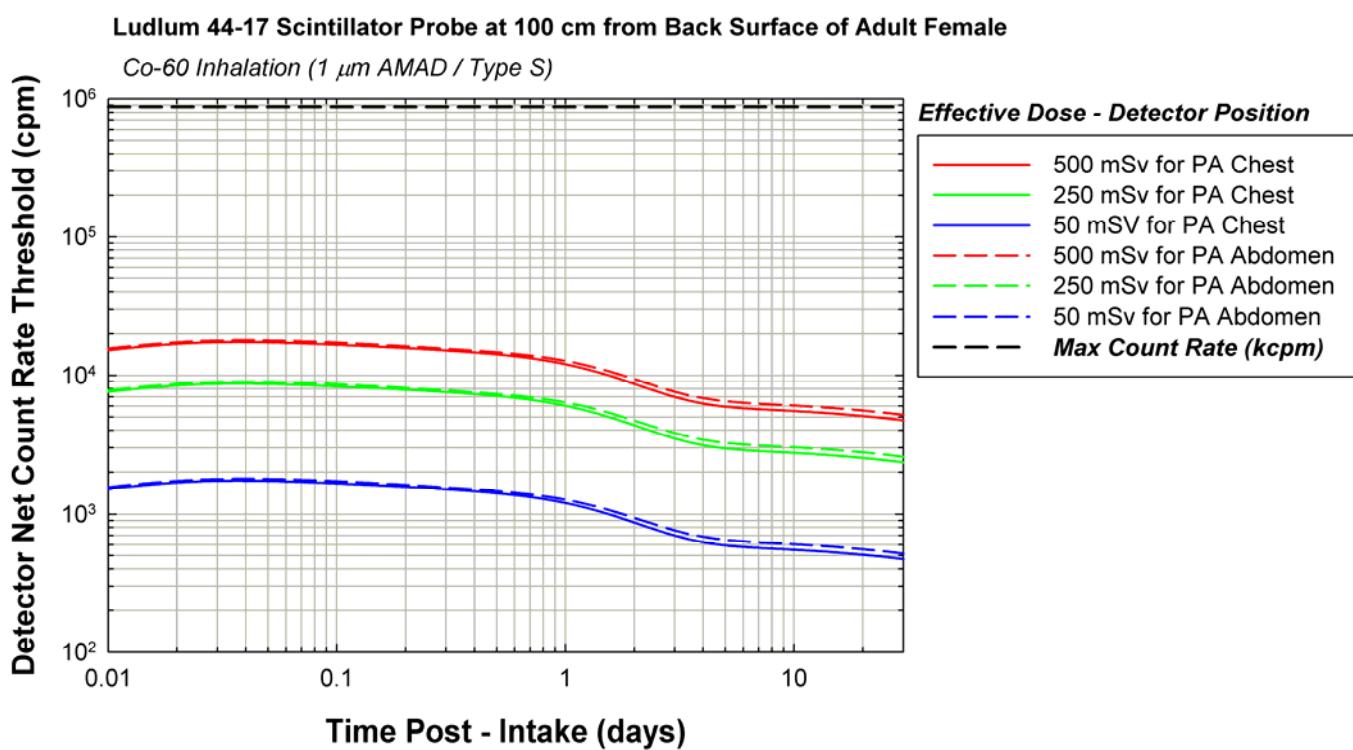
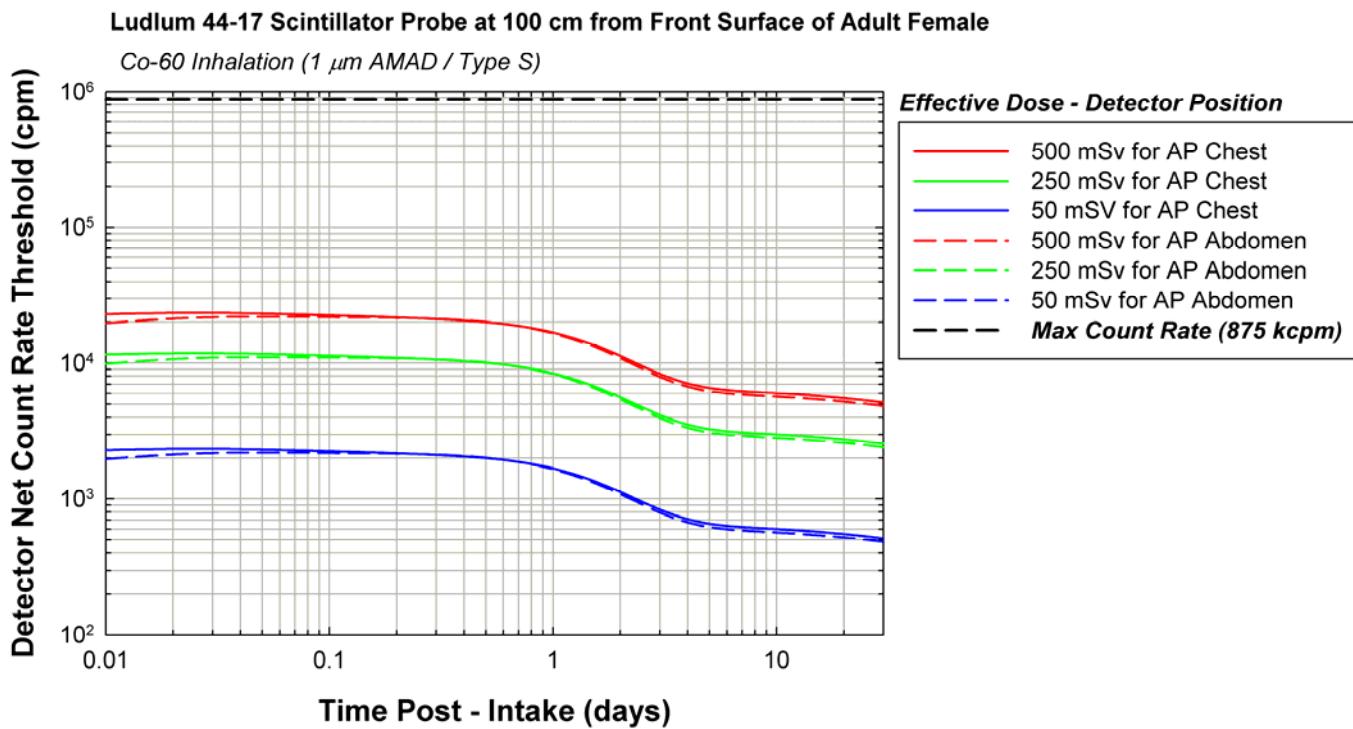
**Table D5** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
**Cobalt-60, Inhalation, 1- $\mu$ m AMAD Aerosol, Type S,  $f_A = 0.05$  Ludlum 44-17 Scintillator Probe**



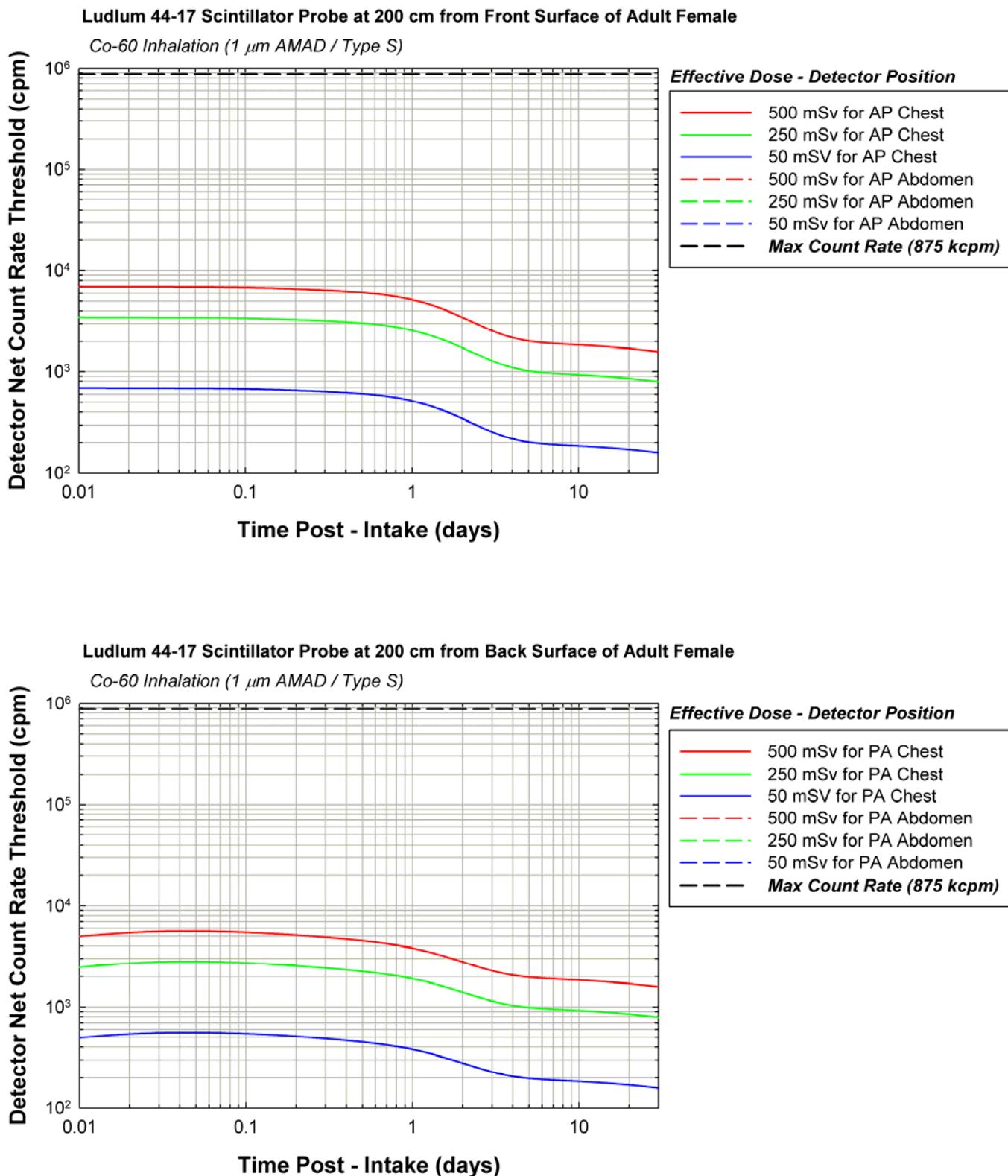
**Table D5 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 1- $\mu$ m AMAD Aerosol, Type S,  $f_A = 0.05$  **Ludlum 44-17 Scintillator Probe****



**Table D5 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 1- $\mu$ m AMAD Aerosol, Type S,  $f_A = 0.05$  **Ludlum 44-17 Scintillator Probe****



**Table D5 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 1- $\mu$ m AMAD Aerosol, Type S,  $f_A = 0.05$  **Ludlum 44-17 Scintillator Probe****



**Table D6 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Cobalt-60, Inhalation, 5-μm AMAD Aerosol, Type M, f<sub>A</sub> = 0.10 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		2.39E+05	2.34E+05	1.47E+05	1.75E+05	1.19E+06	1.17E+06	7.36E+05	8.74E+05	2.39E+06	2.34E+06	1.47E+06	1.75E+06		
1		2.22E+05	2.68E+05	1.41E+05	1.97E+05	1.11E+06	1.34E+06	7.04E+05	9.86E+05	2.22E+06	2.68E+06	1.41E+06	1.97E+06		
2		1.99E+05	2.87E+05	1.26E+05	1.99E+05	9.93E+05	1.44E+06	6.30E+05	9.94E+05	1.99E+06	2.87E+06	1.26E+06	1.99E+06		
4		1.81E+05	3.01E+05	1.13E+05	1.82E+05	9.06E+05	1.50E+06	5.66E+05	9.08E+05	1.81E+06	3.01E+06	1.13E+06	1.82E+06		
6		1.73E+05	3.05E+05	1.07E+05	1.66E+05	8.66E+05	1.53E+06	5.34E+05	8.31E+05	1.73E+06	3.05E+06	1.07E+06	1.66E+06		
8		1.67E+05	3.07E+05	1.02E+05	1.56E+05	8.33E+05	1.53E+06	5.12E+05	7.79E+05	1.67E+06	3.07E+06	1.02E+06	1.56E+06		
10		1.60E+05	3.05E+05	9.85E+04	1.48E+05	8.01E+05	1.52E+06	4.92E+05	7.40E+05	1.60E+06	3.05E+06	9.85E+05	1.48E+06		
12		1.54E+05	3.01E+05	9.49E+04	1.42E+05	7.70E+05	1.50E+06	4.75E+05	7.09E+05	1.54E+06	3.01E+06	9.49E+05	1.42E+06		
14		1.48E+05	2.95E+05	9.17E+04	1.37E+05	7.40E+05	1.47E+06	4.58E+05	6.83E+05	1.48E+06	2.95E+06	9.17E+05	1.37E+06		
16		1.42E+05	2.87E+05	8.85E+04	1.32E+05	7.10E+05	1.43E+06	4.43E+05	6.58E+05	1.42E+06	2.87E+06	8.85E+05	1.32E+06		
18		1.36E+05	2.78E+05	8.55E+04	1.27E+05	6.81E+05	1.39E+06	4.28E+05	6.33E+05	1.36E+06	2.78E+06	8.55E+05	1.27E+06		
20		1.31E+05	2.68E+05	8.27E+04	1.22E+05	6.53E+05	1.34E+06	4.13E+05	6.08E+05	1.31E+06	2.68E+06	8.27E+05	1.22E+06		
1		1.20E+05	2.47E+05	7.72E+04	1.12E+05	6.01E+05	1.24E+06	3.86E+05	5.59E+05	1.20E+06	2.47E+06	7.72E+05	1.12E+06		
2		7.74E+04	1.29E+05	5.45E+04	6.27E+04	3.87E+05	6.47E+05	2.73E+05	3.14E+05	7.74E+05	1.29E+06	5.45E+05	6.27E+05		
3		5.84E+04	6.57E+04	4.41E+04	3.72E+04	2.92E+05	3.28E+05	2.21E+05	1.86E+05	5.84E+05	6.57E+05	4.41E+05	3.72E+05		
4		5.05E+04	3.83E+04	3.96E+04	2.61E+04	2.52E+05	1.91E+05	1.98E+05	1.31E+05	5.05E+05	3.83E+05	3.96E+05	2.61E+05		
5		4.70E+04	2.71E+04	3.75E+04	2.15E+04	2.35E+05	1.36E+05	1.87E+05	1.07E+05	4.70E+05	2.71E+05	3.75E+05	2.15E+05		
6		4.52E+04	2.25E+04	3.63E+04	1.94E+04	2.26E+05	1.13E+05	1.81E+05	9.69E+04	4.52E+05	2.25E+05	3.63E+05	1.94E+05		
7		4.40E+04	2.04E+04	3.54E+04	1.83E+04	2.20E+05	1.02E+05	1.77E+05	9.15E+04	4.40E+05	2.04E+05	3.54E+05	1.83E+05		
8		4.32E+04	1.93E+04	3.47E+04	1.76E+04	2.16E+05	9.64E+04	1.74E+05	8.81E+04	4.32E+05	1.93E+05	3.47E+05	1.76E+05		
9		4.24E+04	1.86E+04	3.41E+04	1.71E+04	2.12E+05	9.28E+04	1.71E+05	8.55E+04	4.24E+05	1.86E+05	3.41E+05	1.71E+05		
10		4.17E+04	1.80E+04	3.36E+04	1.67E+04	2.08E+05	9.00E+04	1.68E+05	8.33E+04	4.17E+05	1.80E+05	3.36E+05	1.67E+05		
15		3.88E+04	1.63E+04	3.13E+04	1.53E+04	1.94E+05	8.17E+04	1.56E+05	7.63E+04	3.88E+05	1.63E+05	3.13E+05	1.53E+05		
20		3.60E+04	1.47E+04	2.89E+04	1.38E+04	1.80E+05	7.34E+04	1.45E+05	6.92E+04	3.60E+05	1.47E+05	2.89E+05	1.38E+05		
25		3.38E+04	1.38E+04	2.72E+04	1.30E+04	1.69E+05	6.90E+04	1.36E+05	6.51E+04	3.38E+05	1.38E+05	2.72E+05	1.30E+05		
30		3.17E+04	1.29E+04	2.55E+04	1.22E+04	1.59E+05	6.45E+04	1.28E+05	6.10E+04	3.17E+05	1.29E+05	2.55E+05	1.22E+05		

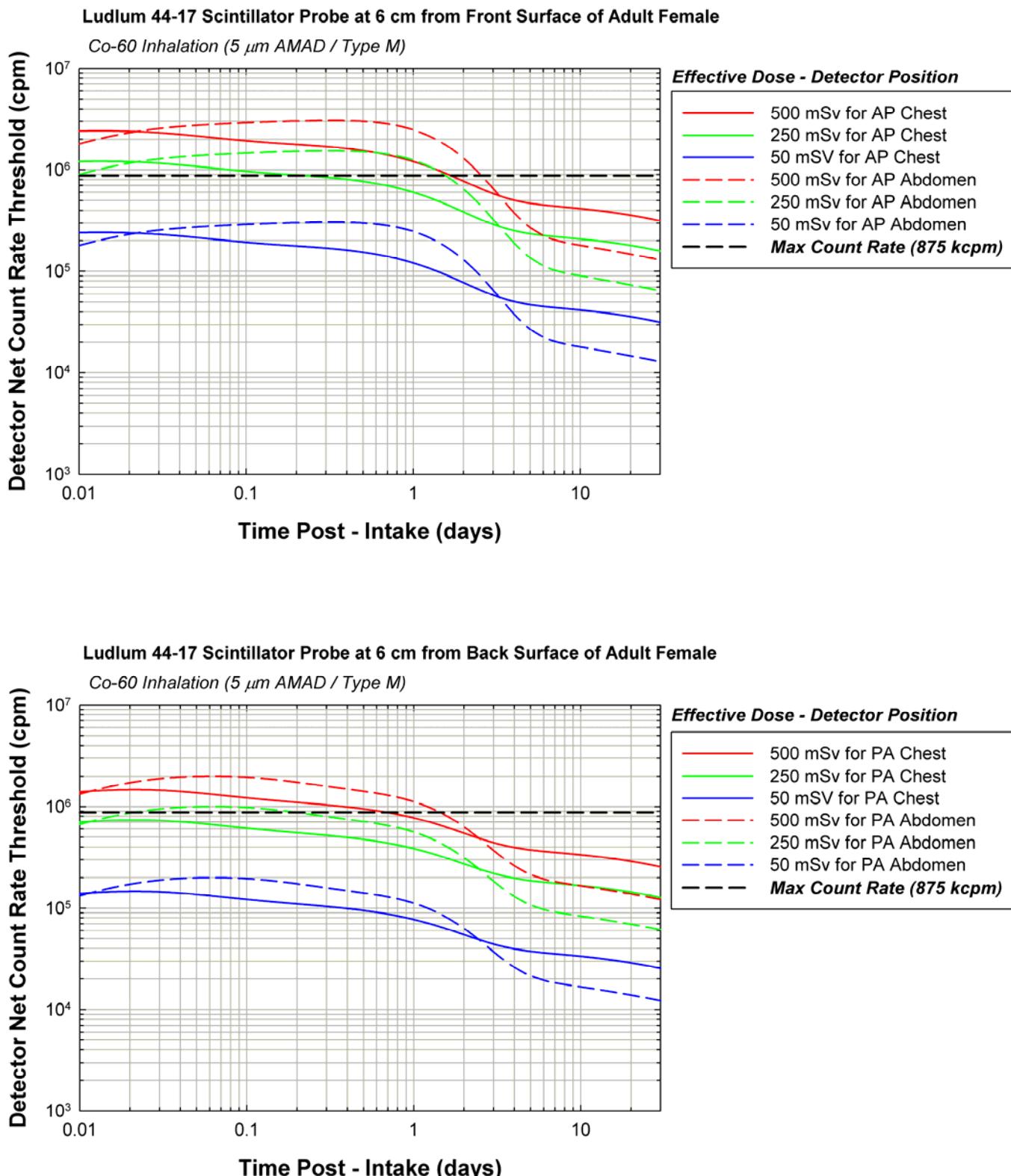
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		8.36E+04	7.59E+04	4.93E+04	5.76E+04	4.18E+05	3.79E+05	2.47E+05	2.88E+05	8.36E+05	7.59E+05	4.93E+05	5.76E+05		
1		8.15E+04	8.18E+04	4.93E+04	6.13E+04	4.08E+05	4.09E+05	2.46E+05	3.07E+05	8.15E+05	8.18E+05	4.93E+05	6.13E+05		
2		7.56E+04	8.33E+04	4.59E+04	5.96E+04	3.78E+05	4.17E+05	2.30E+05	2.98E+05	7.56E+05	8.33E+05	4.59E+05	5.96E+05		
4		7.08E+04	8.26E+04	4.20E+04	5.48E+04	3.54E+05	4.13E+05	2.10E+05	2.74E+05	7.08E+05	8.26E+05	4.20E+05	5.48E+05		
6		6.84E+04	8.10E+04	3.97E+04	5.13E+04	3.42E+05	4.05E+05	1.99E+05	2.56E+05	6.84E+05	8.10E+05	3.97E+05	5.13E+05		
8		6.63E+04	7.93E+04	3.80E+04	4.87E+04	3.32E+05	3.96E+05	1.90E+05	2.43E+05	6.63E+05	7.93E+05	3.80E+05	4.87E+05		
10		6.43E+04	7.73E+04	3.64E+04	4.66E+04	3.21E+05	3.86E+05	1.82E+05	2.33E+05	6.43E+05	7.73E+05	3.64E+05	4.66E+05		
12		6.21E+04	7.50E+04	3.51E+04	4.48E+04	3.11E+05	3.75E+05	1.75E+05	2.24E+05	6.21E+05	7.50E+05	3.51E+05	4.48E+05		
14		5.99E+04	7.26E+04	3.38E+04	4.32E+04	3.00E+05	3.63E+05	1.69E+05	2.16E+05	5.99E+05	7.26E+05	3.38E+05	4.32E+05		
16		5.77E+04	7.00E+04	3.25E+04	4.16E+04	2.88E+05	3.50E+05	1.62E+05	2.08E+05	5.77E+05	7.00E+05	3.25E+05	4.16E+05		
18		5.54E+04	6.73E+04	3.12E+04	4.00E+04	2.77E+05	3.37E+05	1.56E+05	2.00E+05	5.54E+05	6.73E+05	3.12E+05	4.00E+05		
20		5.31E+04	6.46E+04	3.00E+04	3.84E+04	2.66E+05	3.23E+05	1.50E+05	1.92E+05	5.31E+05	6.46E+05	3.00E+05	3.84E+05		
1		4.87E+04	5.90E+04	2.77E+04	3.54E+04	2.43E+05	2.95E+05	1.39E+05	1.77E+05	4.87E+05	5.90E+05	2.77E+05	3.54E+05		
2		2.81E+04	3.17E+04	1.75E+04	2.08E+04	1.41E+05	1.59E+05	8.75E+04	1.04E+05	2.81E+05	3.17E+05	1.75E+05	2.08E+05		
3		1.82E+04	1.80E+04	1.26E+04	1.36E+04	9.09E+04	8.99E+04	6.31E+04	6.78E+04	1.82E+05	1.80E+05	1.26E+05	1.36E+05		
4		1.40E+04	1.21E+04	1.05E+04	1.04E+04	6.99E+04	6.07E+04	5.27E+04	5.21E+04	1.40E+05	1.21E+05	1.05E+05	1.04E+05		
5		1.22E+04	9.76E+03	9.61E+03	9.08E+03	6.10E+04	4.88E+04	4.81E+04	4.54E+04	1.22E+05	9.76E+04	9.61E+04	9.08E+04		
6		1.14E+04	8.72E+03	9.15E+03	8.46E+03	5.70E+04	4.36E+04	4.57E+04	4.23E+04	1.14E+05	8.72E+04	9.15E+04	8.46E+04		
7		1.10E+04	8.22E+03	8.87E+03	8.11E+03	5.48E+04	4.11E+04	4.43E+04	4.05E+04	1.10E+05	8.22E+04	8.87E+04	8.11E+04		
8		1.07E+04	7.92E+03	8.66E+03	7.87E+03	5.33E+04	3.96E+04	4.33E+04	3.93E+04	1.07E+05	7.92E+04	8.66E+04	7.87E+04		
9		1.04E+04	7.70E+03	8.48E+03	7.68E+03	5.22E+04	3.85E+04	4.24E+04	3.84E+04	1.04E+05	7.70E+04	8.48E+04	7.68E+04		
10		1.02E+04	7.52E+03												

**Table D6 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 5-μm AMAD Aerosol, Type M, f<sub>A</sub> = 0.10 Ludlum 44-17 Scintillator Probe**

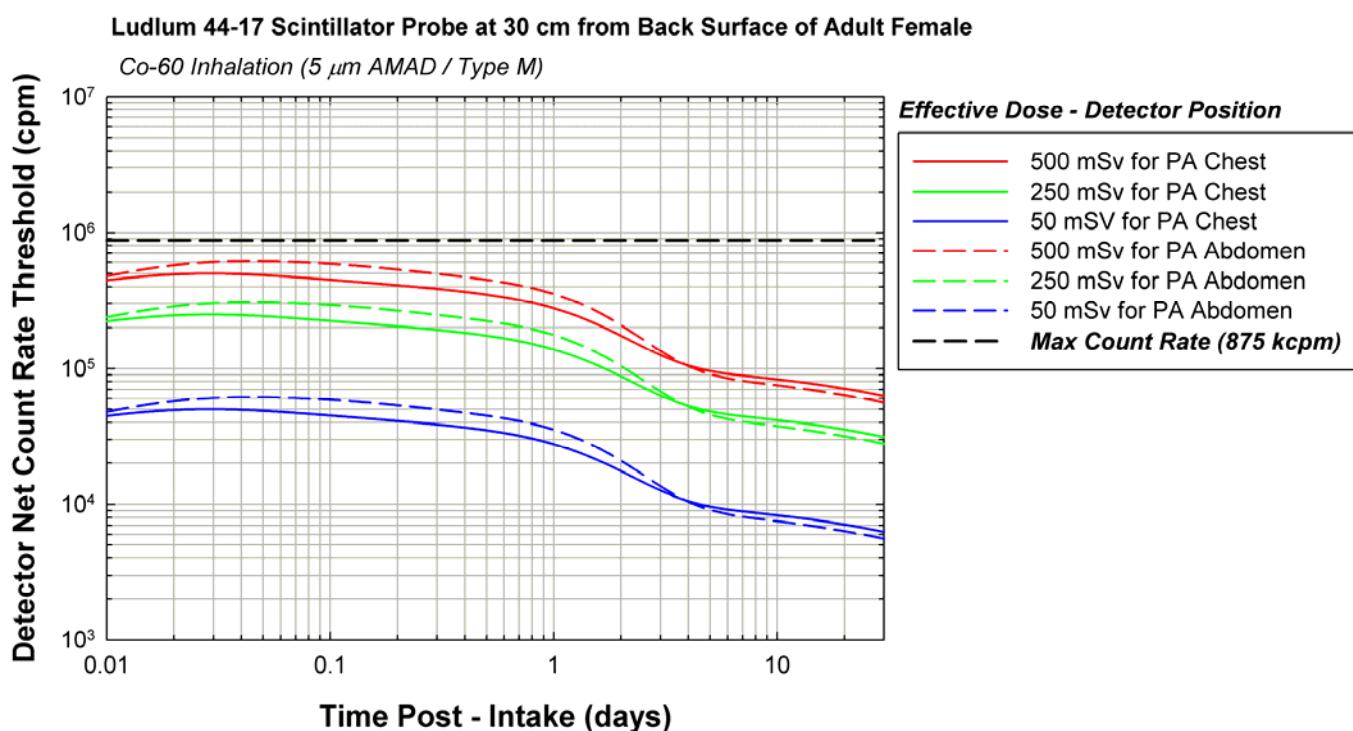
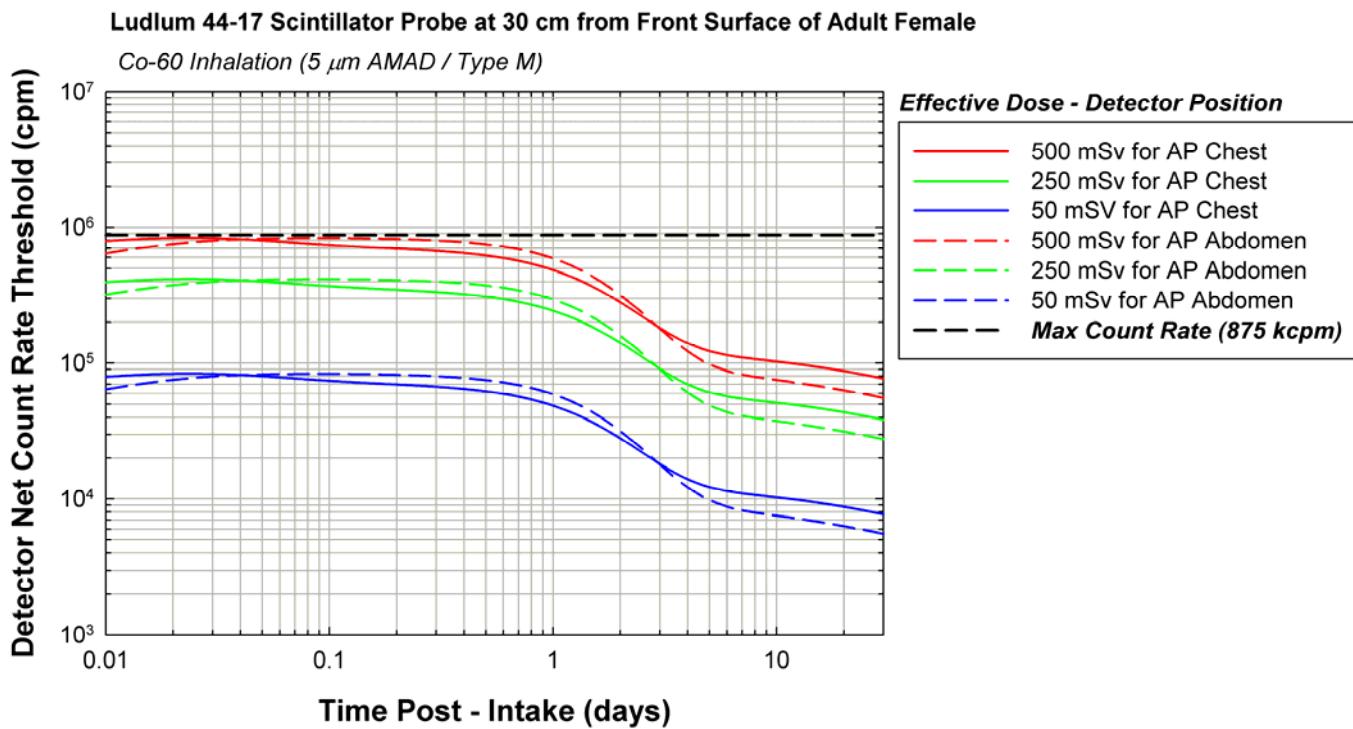
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		1.56E+04	1.41E+04	1.05E+04	1.05E+04	7.78E+04	7.06E+04	5.27E+04	5.23E+04	1.56E+05	1.41E+05	1.05E+05	1.05E+05		
1		1.54E+04	1.46E+04	1.09E+04	1.09E+04	7.72E+04	7.29E+04	5.44E+04	5.43E+04	1.54E+05	1.46E+05	1.09E+05	1.09E+05		
2		1.49E+04	1.45E+04	1.04E+04	1.05E+04	7.46E+04	7.23E+04	5.21E+04	5.23E+04	1.49E+05	1.45E+05	1.04E+05	1.05E+05		
4		1.42E+04	1.42E+04	9.72E+03	9.68E+03	7.11E+04	7.10E+04	4.86E+04	4.84E+04	1.42E+05	1.42E+05	9.72E+04	9.68E+04		
6		1.37E+04	1.39E+04	9.23E+03	9.14E+03	6.86E+04	6.94E+04	4.62E+04	4.57E+04	1.37E+05	1.39E+05	9.23E+04	9.14E+04		
8		1.33E+04	1.35E+04	8.84E+03	8.75E+03	6.63E+04	6.75E+04	4.42E+04	4.38E+04	1.33E+05	1.35E+05	8.84E+04	8.75E+04		
10		1.28E+04	1.31E+04	8.49E+03	8.43E+03	6.42E+04	6.54E+04	4.24E+04	4.21E+04	1.28E+05	1.31E+05	8.49E+04	8.43E+04		
12		1.24E+04	1.26E+04	8.16E+03	8.14E+03	6.20E+04	6.31E+04	4.08E+04	4.07E+04	1.24E+05	1.26E+05	8.16E+04	8.14E+04		
14		1.20E+04	1.21E+04	7.84E+03	7.87E+03	5.98E+04	6.06E+04	3.92E+04	3.93E+04	1.20E+05	1.21E+05	7.84E+04	7.87E+04		
16		1.15E+04	1.16E+04	7.53E+03	7.60E+03	5.75E+04	5.81E+04	3.76E+04	3.80E+04	1.15E+05	1.16E+05	7.53E+04	7.60E+04		
18		1.10E+04	1.11E+04	7.22E+03	7.33E+03	5.52E+04	5.56E+04	3.61E+04	3.67E+04	1.10E+05	1.11E+05	7.22E+04	7.33E+04		
20		1.06E+04	1.06E+04	6.92E+03	7.06E+03	5.29E+04	5.31E+04	3.46E+04	3.53E+04	1.06E+05	1.06E+05	6.92E+04	7.06E+04		
1		9.67E+03	9.65E+03	6.34E+03	6.54E+03	4.84E+04	4.83E+04	3.17E+04	3.27E+04	9.67E+04	9.65E+04	6.34E+04	6.54E+04		
2		5.38E+03	5.26E+03	3.72E+03	3.99E+03	2.69E+04	2.63E+04	1.86E+04	2.00E+04	5.38E+04	5.26E+04	3.72E+04	3.99E+04		
3		3.26E+03	3.18E+03	2.46E+03	2.71E+03	1.63E+04	1.59E+04	1.23E+04	1.36E+04	3.26E+04	3.18E+04	2.46E+04	2.71E+04		
4		2.36E+03	2.31E+03	1.93E+03	2.15E+03	1.18E+04	1.15E+04	9.65E+03	1.08E+04	2.36E+04	2.31E+04	1.93E+04	2.15E+04		
5		1.99E+03	1.94E+03	1.70E+03	1.91E+03	9.94E+03	9.72E+03	8.51E+03	9.55E+03	1.99E+04	1.94E+04	1.70E+04	1.91E+04		
6		1.82E+03	1.78E+03	1.59E+03	1.79E+03	9.11E+03	8.91E+03	7.97E+03	8.97E+03	1.82E+04	1.78E+04	1.59E+04	1.79E+04		
7		1.74E+03	1.70E+03	1.53E+03	1.73E+03	8.68E+03	8.48E+03	7.67E+03	8.63E+03	1.74E+04	1.70E+04	1.53E+04	1.73E+04		
8		1.68E+03	1.64E+03	1.49E+03	1.68E+03	8.41E+03	8.21E+03	7.46E+03	8.39E+03	1.68E+04	1.64E+04	1.49E+04	1.68E+04		
9		1.64E+03	1.60E+03	1.46E+03	1.64E+03	8.20E+03	8.00E+03	7.29E+03	8.19E+03	1.64E+04	1.60E+04	1.46E+04	1.64E+04		
10		1.60E+03	1.56E+03	1.43E+03	1.60E+03	8.02E+03	7.82E+03	7.14E+03	8.02E+03	1.60E+04	1.56E+04	1.43E+04	1.60E+04		
15		1.46E+03	1.42E+03	1.31E+03	1.47E+03	7.32E+03	7.12E+03	6.53E+03	7.33E+03	1.46E+04	1.42E+04	1.31E+04	1.47E+04		
20		1.35E+03	1.32E+03	1.21E+03	1.36E+03	6.77E+03	6.59E+03	6.05E+03	6.79E+03	1.35E+04	1.32E+04	1.21E+04	1.36E+04		
25		1.27E+03	1.24E+03	1.14E+03	1.28E+03	6.37E+03	6.20E+03	5.70E+03	6.39E+03	1.27E+04	1.24E+04	1.14E+04	1.28E+04		
30		1.19E+03	1.16E+03	1.07E+03	1.20E+03	5.97E+03	5.81E+03	5.34E+03	5.99E+03	1.19E+04	1.16E+04	1.07E+04	1.20E+04		

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		4.56E+03	4.56E+03	3.27E+03	3.27E+03	2.28E+04	2.28E+04	1.64E+04	1.64E+04	4.56E+04	4.56E+04	3.27E+04	3.27E+04		
1		4.54E+03	4.54E+03	3.40E+03	3.40E+03	2.27E+04	2.27E+04	1.70E+04	1.70E+04	4.54E+04	4.54E+04	3.40E+04	3.40E+04		
2		4.47E+03	4.47E+03	3.31E+03	3.31E+03	2.23E+04	2.23E+04	1.66E+04	1.66E+04	4.47E+04	4.47E+04	3.31E+04	3.31E+04		
4		4.29E+03	4.29E+03	3.07E+03	3.07E+03	2.15E+04	2.15E+04	1.53E+04	1.53E+04	4.29E+04	4.29E+04	3.07E+04	3.07E+04		
6		4.14E+03	4.14E+03	2.87E+03	2.87E+03	2.07E+04	2.07E+04	1.44E+04	1.44E+04	4.14E+04	4.14E+04	2.87E+04	2.87E+04		
8		4.01E+03	4.01E+03	2.72E+03	2.72E+03	2.00E+04	2.00E+04	1.36E+04	1.36E+04	4.01E+04	4.01E+04	2.72E+04	2.72E+04		
10		3.88E+03	3.88E+03	2.60E+03	2.60E+03	1.94E+04	1.94E+04	1.30E+04	1.30E+04	3.88E+04	3.88E+04	2.60E+04	2.60E+04		
12		3.76E+03	3.76E+03	2.48E+03	2.48E+03	1.88E+04	1.88E+04	1.24E+04	1.24E+04	3.76E+04	3.76E+04	2.48E+04	2.48E+04		
14		3.63E+03	3.63E+03	2.38E+03	2.38E+03	1.82E+04	1.82E+04	1.19E+04	1.19E+04	3.63E+04	3.63E+04	2.38E+04	2.38E+04		
16		3.50E+03	3.50E+03	2.28E+03	2.28E+03	1.75E+04	1.75E+04	1.14E+04	1.14E+04	3.50E+04	3.50E+04	2.28E+04	2.28E+04		
18		3.37E+03	3.37E+03	2.19E+03	2.19E+03	1.68E+04	1.68E+04	1.09E+04	1.09E+04	3.37E+04	3.37E+04	2.19E+04	2.19E+04		
20		3.23E+03	3.23E+03	2.10E+03	2.10E+03	1.62E+04	1.62E+04	1.05E+04	1.05E+04	3.23E+04	3.23E+04	2.10E+04	2.10E+04		
1		2.96E+03	2.96E+03	1.92E+03	1.92E+03	1.48E+04	1.48E+04	9.60E+03	9.60E+03	2.96E+04	2.96E+04	1.92E+04	1.92E+04		
2		1.65E+03	1.65E+03	1.15E+03	1.15E+03	8.27E+03	8.27E+03	5.76E+03	5.76E+03	1.65E+04	1.65E+04	1.15E+04	1.15E+04		
3		1.00E+03	1.00E+03	7.87E+02	7.87E+02	5.00E+03	5.00E+03	3.93E+03	3.93E+03	1.00E+04	1.00E+04	7.87E+03	7.87E+03		
4		7.21E+02	7.21E+02	6.31E+02	6.31E+02	3.61E+03	3.61E+03	3.16E+03	3.16E+03	7.21E+03	7.21E+03	6.31E+03	6.31E+03		
5		6.06E+02	6.06E+02	5.64E+02	5.64E+02	3.03E+03	3.03E+03	2.82E+03	2.82E+03	6.06E+03	6.06E+03	5.64E+03	5.64E+03		
6		5.54E+02	5.54E+02	5.31E+02	5.31E+02	2.77E+03	2.77E+03	2.66E+03	2.66E+03	5.54E+03	5.54E+03	5.31E+03	5.31E+03		
7		5.28E+02	5.28E+02	5.12E+02	5.12E+02	2.64E+03	2.64E+03	2.56E+03	2.56E+03	5.28E+03	5.28E+03	5.12E+03	5.12E+03		
8		5.11E+02	5.11E+02	4.98E+02	4.98E+02	2.56E+03	2.56E+03	2.49E+03	2.49E+03	5.11E+03	5.11E+03	4.98E+03	4.98E+03		
9		4.99E+02	4.99E+02	4.87E+02	4.87E+02	2.49E+03	2.49E+03	2.44E+03	2.44E+03	4.99E+03	4.99E+03	4.87E+03	4.87E+03		
10		4.88E+02	4.88E+02	4.77E+02	4.77E+02	2.44E+03	2.44E+03	2.39E+03	2.39E+03	4.88E+03	4.88E+03	4.77E+03	4.77E+03</		

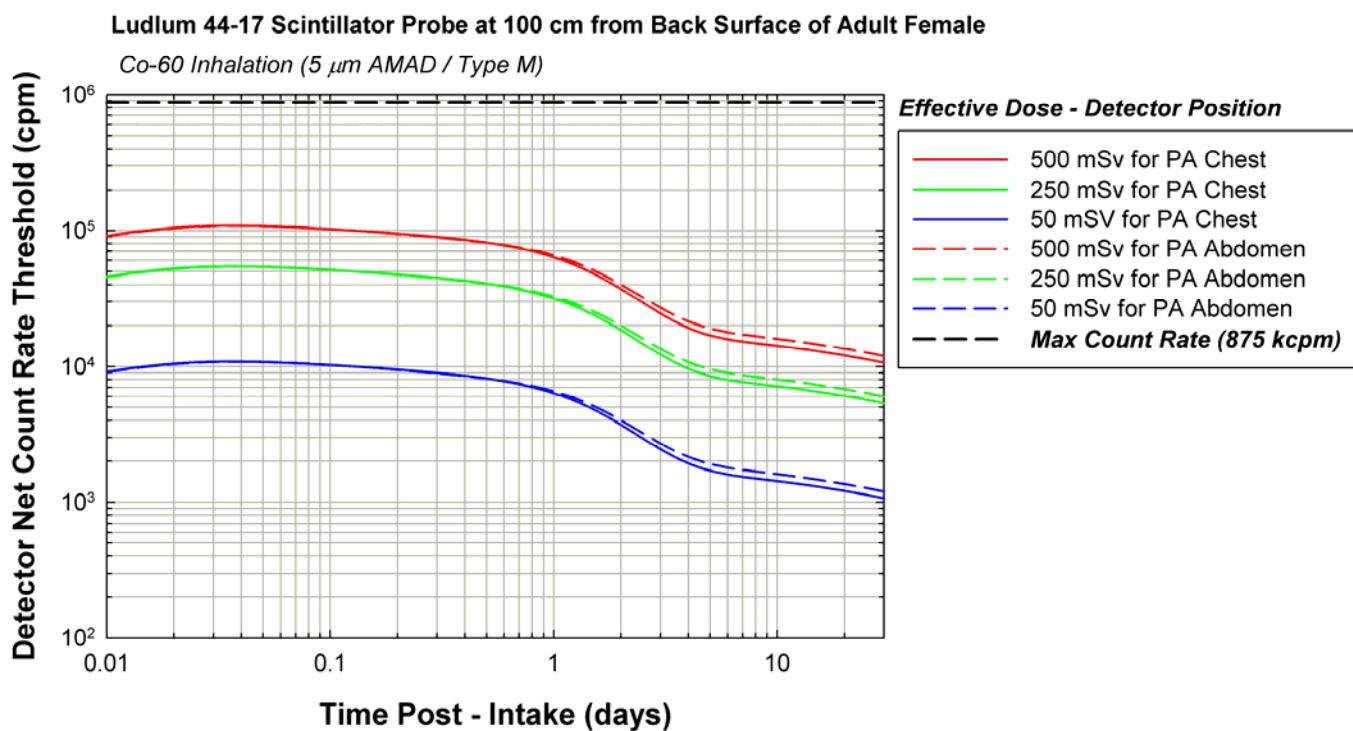
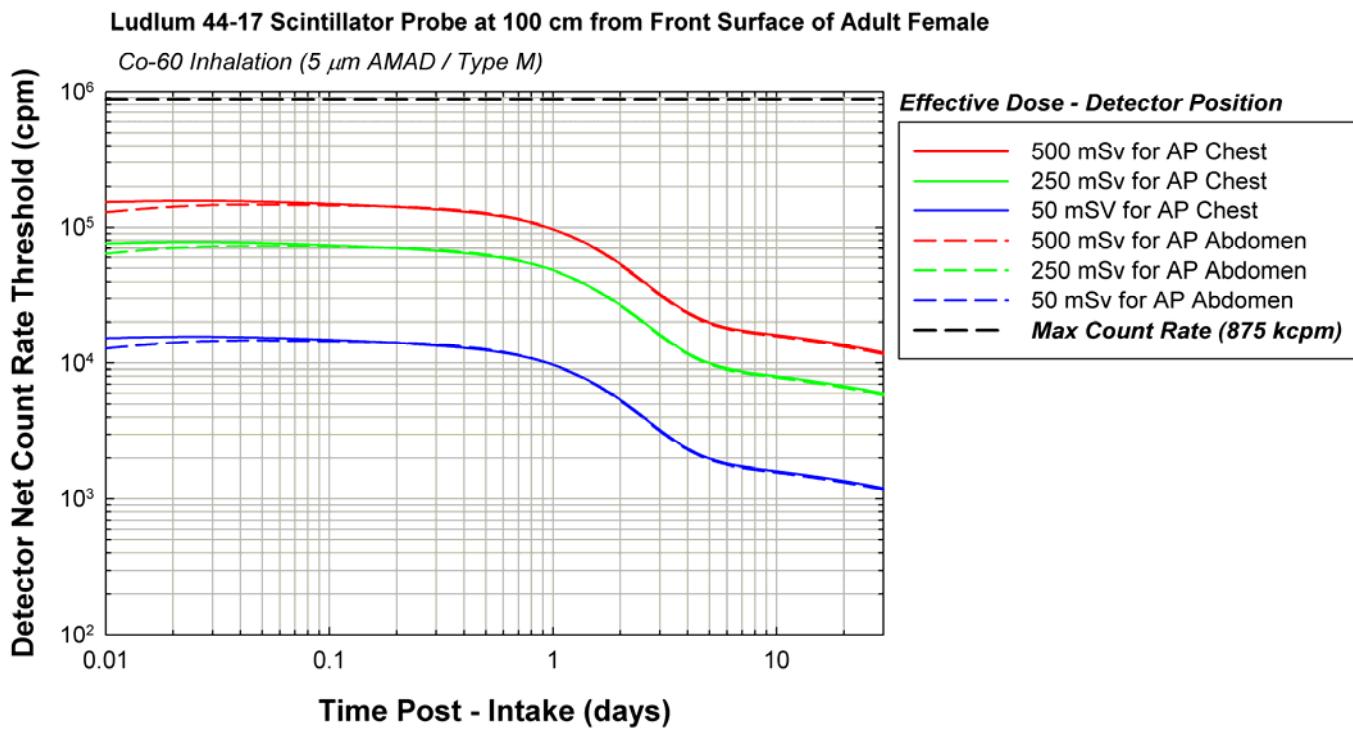
**Table D6** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
**Cobalt-60, Inhalation, 5- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.10$  Ludlum 44-17 Scintillator Probe**



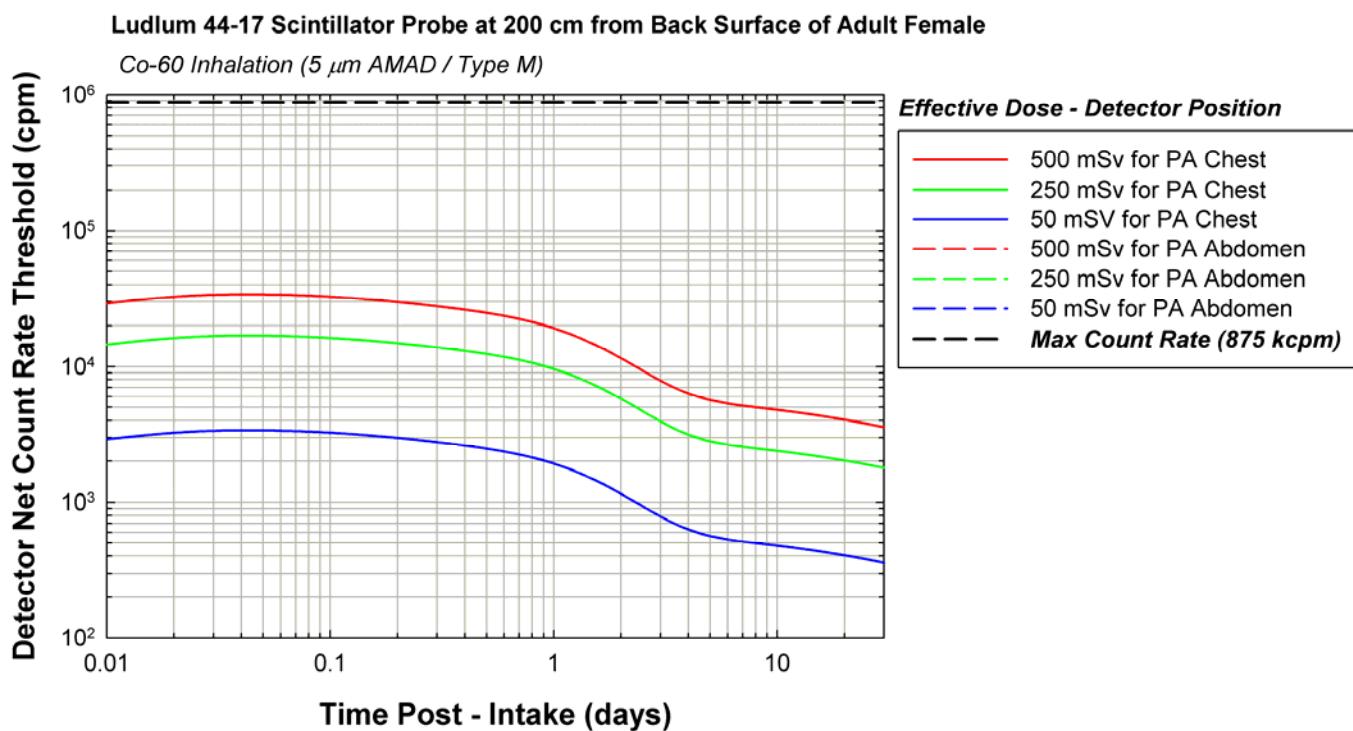
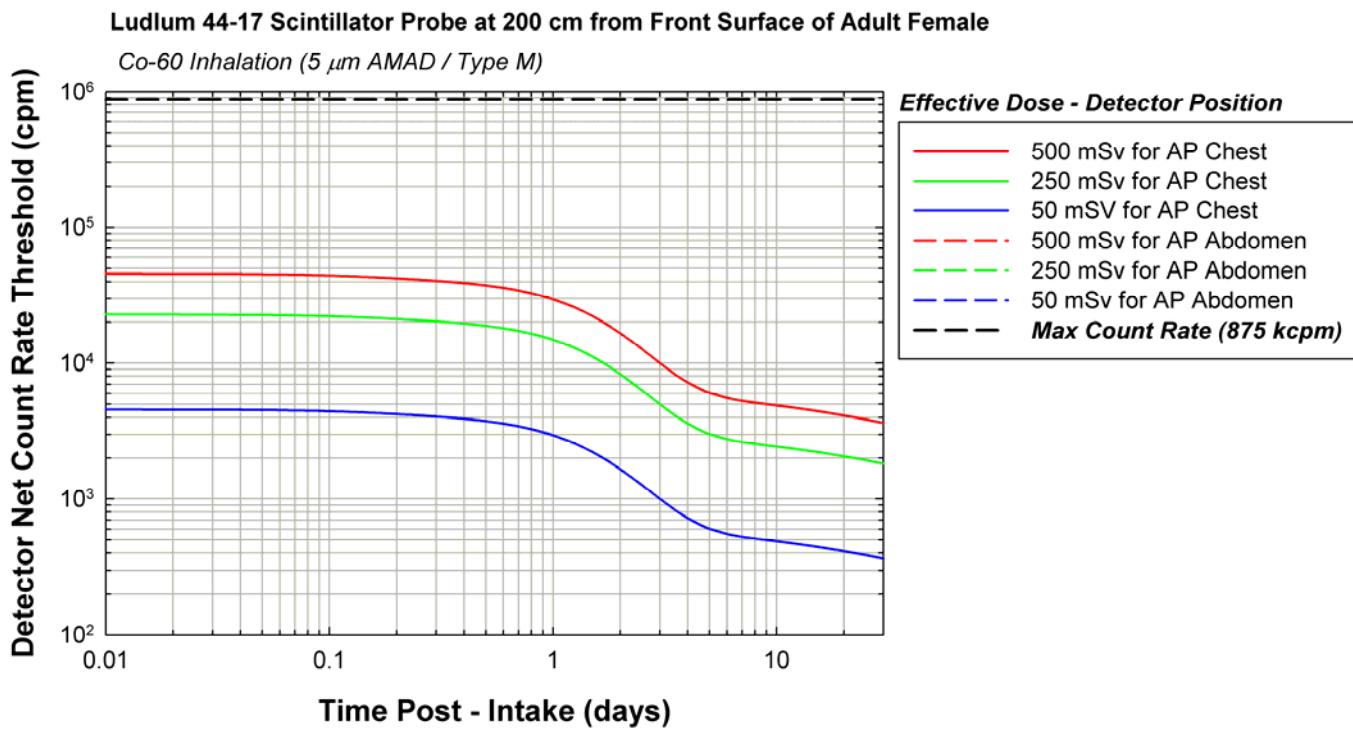
**Table D6** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
**Cobalt-60, Inhalation, 5- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.10$  Ludlum 44-17 Scintillator Probe**



**Table D6 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 5- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.10$  **Ludlum 44-17 Scintillator Probe****



**Table D6 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 5- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.10$  **Ludlum 44-17 Scintillator Probe****



**Table D7 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Cobalt-60, Inhalation, 5-μm AMAD Aerosol, Type S,  $f_A = 0.05$  **Ludlum 44-17 Scintillator Probe****

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		9.78E+04	9.85E+04	6.05E+04	7.33E+04	4.89E+05	4.93E+05	3.03E+05	3.67E+05	9.78E+05	9.85E+05	6.05E+05	7.33E+05		
1		9.04E+04	1.14E+05	5.77E+04	8.37E+04	4.52E+05	5.70E+05	2.89E+05	4.18E+05	9.04E+05	1.14E+06	5.77E+05	8.37E+05		
2		7.94E+04	1.24E+05	5.10E+04	8.50E+04	3.97E+05	6.18E+05	2.55E+05	4.25E+05	7.94E+05	1.24E+06	5.10E+05	8.50E+05		
4		7.07E+04	1.31E+05	4.46E+04	7.84E+04	3.54E+05	6.57E+05	2.23E+05	3.92E+05	7.07E+05	1.31E+06	4.46E+05	7.84E+05		
6		6.70E+04	1.35E+05	4.16E+04	7.21E+04	3.35E+05	6.76E+05	2.08E+05	3.61E+05	6.70E+05	1.35E+06	4.16E+05	7.21E+05		
8		6.43E+04	1.37E+05	3.97E+04	6.77E+04	3.22E+05	6.84E+05	1.98E+05	3.38E+05	6.43E+05	1.37E+06	3.97E+05	6.77E+05		
10		6.21E+04	1.37E+05	3.82E+04	6.43E+04	3.10E+05	6.84E+05	1.91E+05	3.22E+05	6.21E+05	1.37E+06	3.82E+05	6.43E+05		
12		6.00E+04	1.36E+05	3.70E+04	6.16E+04	3.00E+05	6.78E+05	1.85E+05	3.08E+05	6.00E+05	1.36E+06	3.70E+05	6.16E+05		
14		5.81E+04	1.33E+05	3.60E+04	5.93E+04	2.90E+05	6.65E+05	1.80E+05	2.97E+05	5.81E+05	1.33E+06	3.60E+05	5.93E+05		
16		5.61E+04	1.30E+05	3.50E+04	5.71E+04	2.81E+05	6.49E+05	1.75E+05	2.85E+05	5.61E+05	1.30E+06	3.50E+05	5.71E+05		
18		5.42E+04	1.26E+05	3.41E+04	5.49E+04	2.71E+05	6.30E+05	1.70E+05	2.74E+05	5.42E+05	1.26E+06	3.41E+05	5.49E+05		
20		5.24E+04	1.22E+05	3.31E+04	5.27E+04	2.62E+05	6.08E+05	1.66E+05	2.64E+05	5.24E+05	1.22E+06	3.31E+05	5.27E+05		
1		4.88E+04	1.12E+05	3.13E+04	4.83E+04	2.44E+05	5.60E+05	1.57E+05	2.42E+05	4.88E+05	1.12E+06	3.13E+05	4.83E+05		
2		3.27E+04	5.65E+04	2.30E+04	2.57E+04	1.64E+05	2.82E+05	1.15E+05	1.29E+05	3.27E+05	5.65E+05	2.30E+05	2.57E+05		
3		2.50E+04	2.63E+04	1.88E+04	1.38E+04	1.25E+05	1.31E+05	9.40E+04	6.91E+04	2.50E+05	2.63E+05	1.88E+05	1.38E+05		
4		2.18E+04	1.34E+04	1.70E+04	8.80E+03	1.09E+05	6.71E+04	8.49E+04	4.40E+04	2.18E+05	1.34E+05	1.70E+05	8.80E+04		
5		2.04E+04	8.36E+03	1.62E+04	6.80E+03	1.02E+05	4.18E+04	8.09E+04	3.40E+04	2.04E+05	8.36E+04	1.62E+05	6.80E+04		
6		1.98E+04	6.41E+03	1.58E+04	6.01E+03	9.88E+04	3.20E+04	7.89E+04	3.00E+04	1.98E+05	6.41E+04	1.58E+05	6.01E+04		
7		1.94E+04	5.64E+03	1.55E+04	5.67E+03	9.70E+04	2.82E+04	7.76E+04	2.84E+04	1.94E+05	5.64E+04	1.55E+05	5.67E+04		
8		1.92E+04	5.32E+03	1.53E+04	5.51E+03	9.58E+04	2.66E+04	7.67E+04	2.75E+04	1.92E+05	5.32E+04	1.53E+05	5.51E+04		
9		1.89E+04	5.16E+03	1.52E+04	5.41E+03	9.47E+04	2.58E+04	7.59E+04	2.71E+04	1.89E+05	5.16E+04	1.52E+05	5.41E+04		
10		1.88E+04	5.06E+03	1.50E+04	5.34E+03	9.38E+04	2.53E+04	7.51E+04	2.67E+04	1.88E+05	5.06E+04	1.50E+05	5.34E+04		
15		1.79E+04	4.80E+03	1.44E+04	5.09E+03	8.97E+04	2.40E+04	7.19E+04	2.54E+04	1.79E+05	4.80E+04	1.44E+05	5.09E+04		
20		1.71E+04	4.53E+03	1.37E+04	4.83E+03	8.57E+04	2.27E+04	6.87E+04	2.42E+04	1.71E+05	4.53E+04	1.37E+05	4.83E+04		
25		1.65E+04	4.34E+03	1.32E+04	4.64E+03	8.25E+04	2.17E+04	6.61E+04	2.32E+04	1.65E+05	4.34E+04	1.32E+05	4.64E+04		
30		1.59E+04	4.15E+03	1.27E+04	4.45E+03	7.93E+04	2.08E+04	6.35E+04	2.23E+04	1.59E+05	4.15E+04	1.27E+05	4.45E+04		

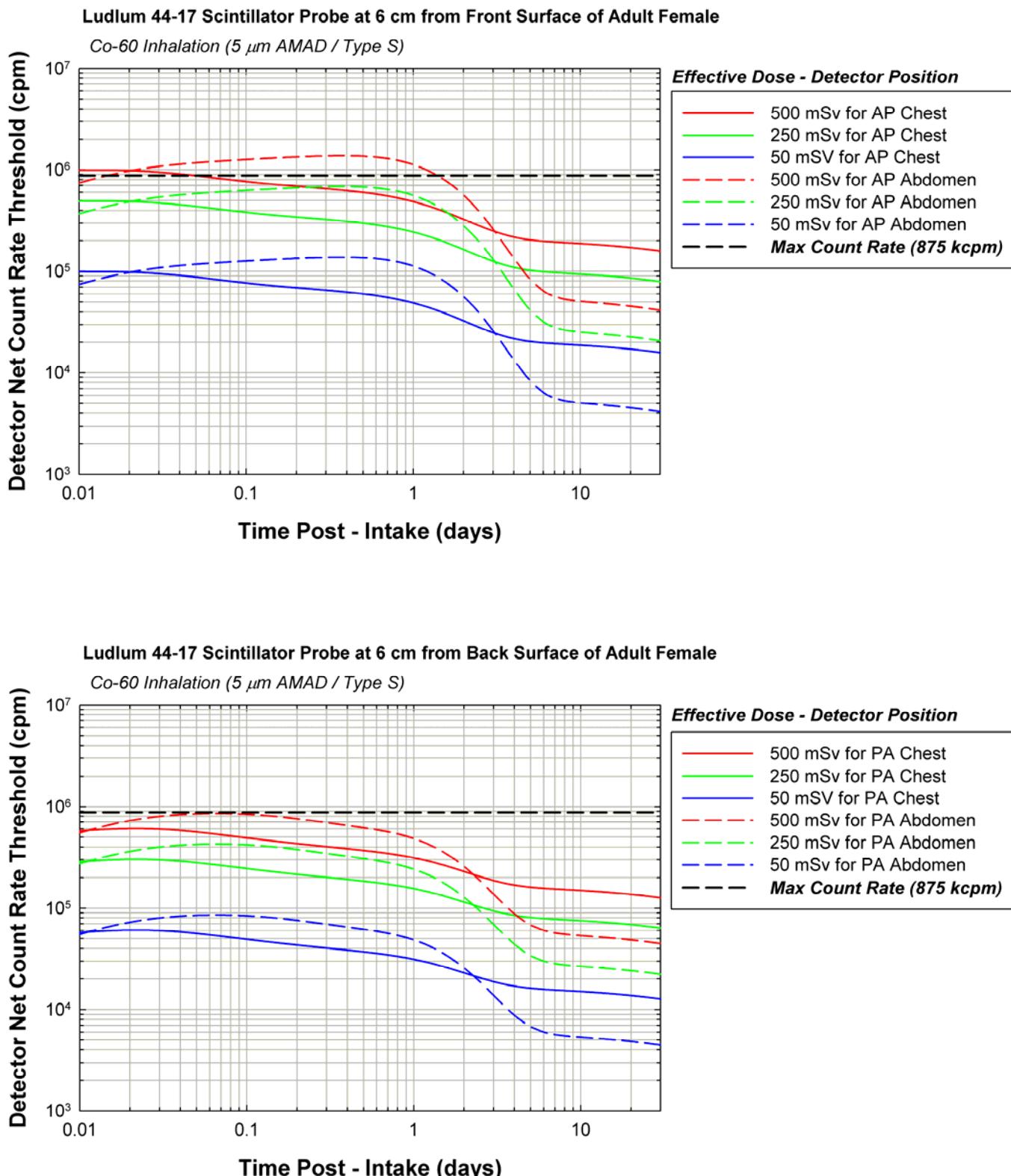
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		3.47E+04	3.17E+04	2.04E+04	2.40E+04	1.74E+05	1.59E+05	1.02E+05	1.20E+05	3.47E+05	3.17E+05	2.04E+05	2.40E+05		
1		3.39E+04	3.44E+04	2.05E+04	2.58E+04	1.69E+05	1.72E+05	1.02E+05	1.29E+05	3.39E+05	3.44E+05	2.05E+05	2.58E+05		
2		3.13E+04	3.53E+04	1.90E+04	2.51E+04	1.56E+05	1.77E+05	9.50E+04	1.26E+05	3.13E+05	3.53E+05	1.90E+05	2.51E+05		
4		2.91E+04	3.54E+04	1.72E+04	2.32E+04	1.46E+05	1.77E+05	8.62E+04	1.16E+05	2.91E+05	3.54E+05	1.72E+05	2.32E+05		
6		2.81E+04	3.50E+04	1.62E+04	2.17E+04	1.41E+05	1.75E+05	8.11E+04	1.08E+05	2.81E+05	3.50E+05	1.62E+05	2.17E+05		
8		2.74E+04	3.44E+04	1.55E+04	2.06E+04	1.37E+05	1.72E+05	7.74E+04	1.03E+05	2.74E+05	3.44E+05	1.55E+05	2.06E+05		
10		2.66E+04	3.37E+04	1.49E+04	1.97E+04	1.33E+05	1.69E+05	7.44E+04	9.87E+04	2.66E+05	3.37E+05	1.49E+05	1.97E+05		
12		2.58E+04	3.29E+04	1.43E+04	1.90E+04	1.29E+05	1.64E+05	7.17E+04	9.50E+04	2.58E+05	3.29E+05	1.43E+05	1.90E+05		
14		2.50E+04	3.19E+04	1.38E+04	1.83E+04	1.25E+05	1.59E+05	6.92E+04	9.16E+04	2.50E+05	3.19E+05	1.38E+05	1.83E+05		
16		2.42E+04	3.08E+04	1.34E+04	1.77E+04	1.21E+05	1.54E+05	6.68E+04	8.83E+04	2.42E+05	3.08E+05	1.34E+05	1.77E+05		
18		2.33E+04	2.97E+04	1.29E+04	1.70E+04	1.17E+05	1.48E+05	6.44E+04	8.50E+04	2.33E+05	2.97E+05	1.29E+05	1.70E+05		
20		2.24E+04	2.85E+04	1.24E+04	1.63E+04	1.12E+05	1.43E+05	6.21E+04	8.17E+04	2.24E+05	2.85E+05	1.24E+05	1.63E+05		
1		2.06E+04	2.61E+04	1.15E+04	1.50E+04	1.03E+05	1.30E+05	5.75E+04	7.51E+04	2.06E+05	2.61E+05	1.15E+05	1.50E+05		
2		1.19E+04	1.36E+04	7.20E+03	8.54E+03	5.93E+04	6.79E+04	3.60E+04	4.27E+04	1.19E+05	1.36E+05	7.20E+04	8.54E+04		
3		7.45E+03	7.21E+03	5.07E+03	5.23E+03	3.72E+04	3.60E+04	2.54E+04	2.61E+04	7.45E+04	7.21E+04	5.07E+04	5.23E+04		
4		5.59E+03	4.53E+03	4.18E+03	3.83E+03	2.80E+04	2.27E+04	2.09E+04	1.92E+04	5.59E+04	4.53E+04	4.18E+04	3.83E+04		
5		4.85E+03	3.48E+03	3.81E+03	3.27E+03	2.42E+04	1.74E+04	1.90E+04	1.63E+04	4.85E+04	3.48E+04	3.81E+04	3.27E+04		
6		4.54E+03	3.06E+03	3.64E+03	3.04E+03	2.27E+04	1.53E+04	1.82E+04	1.52E+04	4.54E+04	3.06E+04	3.64E+04	3.04E+04		
7		4.39E+03	2.88E+03	3.56E+03	2.93E+03	2.20E+04	1.44E+04	1.78E+04	1.47E+04	4.39E+04	2.88E+04	3.56E+04	2.93E+04		
8		4.31E+03	2.80E+03	3.51E+03	2.87E+03	2.16E+04	1.40E+04	1.75E+04	1.44E+04	4.31E+04	2.80E+04	3.51E+04	2.87E+04		
9		4.26E+03	2.75E+03	3.47E+03	2.83E+03	2.13E+04	1.38E+04	1.73E+04	1.42E+04	4.26E+04	2.75E+04	3.47E+04	2.83E+04		
10		4.21E+03	2.72E+03</												

**Table D7 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 5-μm AMAD Aerosol, Type S, f<sub>A</sub> = 0.05 Ludlum 44-17 Scintillator Probe**

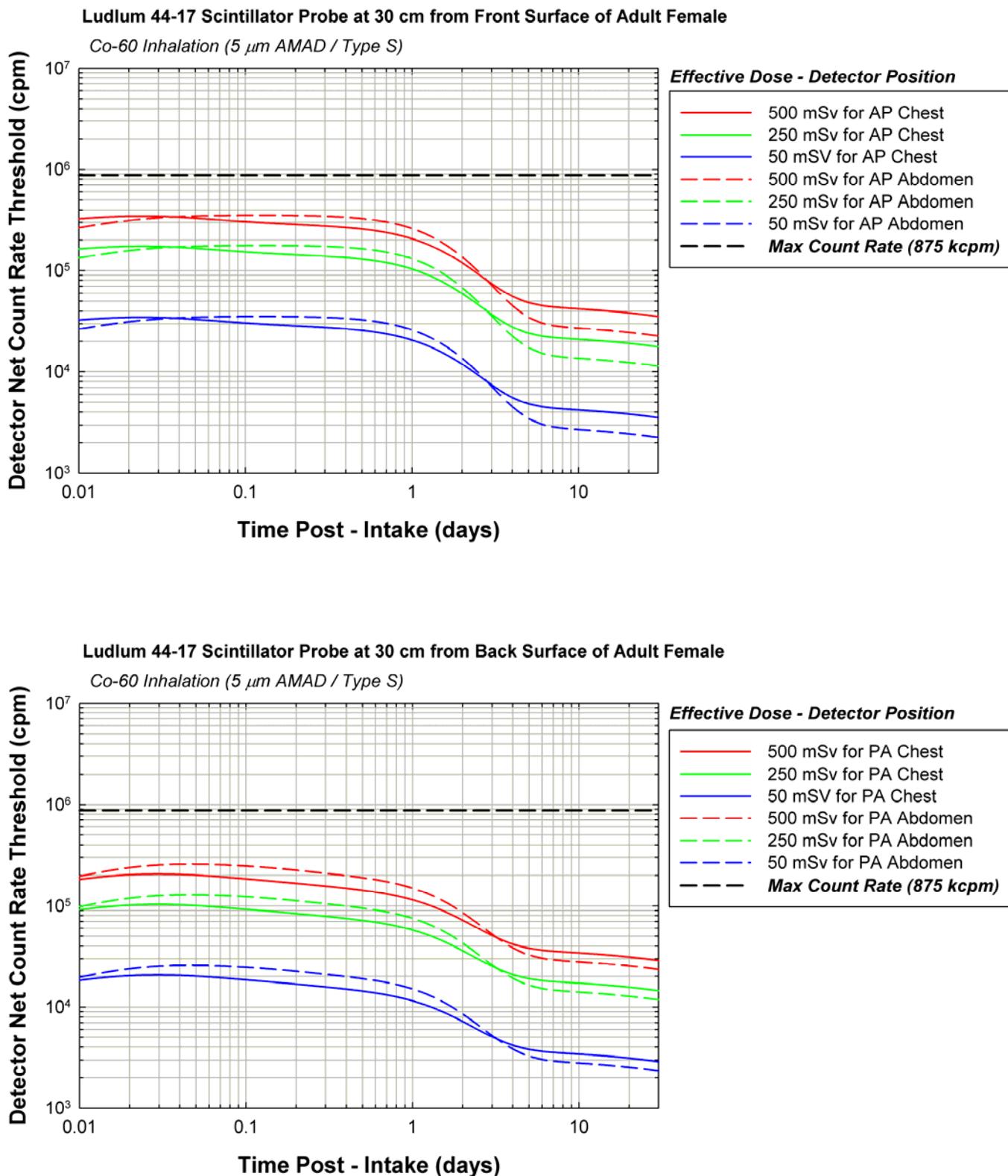
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	6.52E+03	5.88E+03	4.37E+03	4.37E+03	3.26E+04	2.94E+04	2.19E+04	2.18E+04	6.52E+04	5.88E+04	4.37E+04	4.37E+04		
	1	6.48E+03	6.09E+03	4.53E+03	4.56E+03	3.24E+04	3.05E+04	2.27E+04	2.28E+04	6.48E+04	6.09E+04	4.53E+04	4.56E+04		
	2	6.28E+03	6.06E+03	4.34E+03	4.39E+03	3.14E+04	3.03E+04	2.17E+04	2.20E+04	6.28E+04	6.06E+04	4.34E+04	4.39E+04		
	4	6.00E+03	5.98E+03	4.04E+03	4.06E+03	3.00E+04	2.99E+04	2.02E+04	2.03E+04	6.00E+04	5.98E+04	4.04E+04	4.06E+04		
	6	5.81E+03	5.88E+03	3.84E+03	3.84E+03	2.91E+04	2.94E+04	1.92E+04	1.92E+04	5.81E+04	5.88E+04	3.84E+04	3.84E+04		
	8	5.64E+03	5.75E+03	3.68E+03	3.67E+03	2.82E+04	2.87E+04	1.84E+04	1.84E+04	5.64E+04	5.75E+04	3.68E+04	3.67E+04		
	10	5.48E+03	5.59E+03	3.54E+03	3.54E+03	2.74E+04	2.79E+04	1.77E+04	1.77E+04	5.48E+04	5.59E+04	3.54E+04	3.54E+04		
	12	5.31E+03	5.41E+03	3.41E+03	3.42E+03	2.65E+04	2.70E+04	1.70E+04	1.71E+04	5.31E+04	5.41E+04	3.41E+04	3.42E+04		
	14	5.13E+03	5.21E+03	3.28E+03	3.31E+03	2.56E+04	2.60E+04	1.64E+04	1.65E+04	5.13E+04	5.21E+04	3.28E+04	3.31E+04		
	16	4.95E+03	5.00E+03	3.16E+03	3.20E+03	2.47E+04	2.50E+04	1.58E+04	1.60E+04	4.95E+04	5.00E+04	3.16E+04	3.20E+04		
	18	4.76E+03	4.79E+03	3.03E+03	3.09E+03	2.38E+04	2.40E+04	1.52E+04	1.54E+04	4.76E+04	4.79E+04	3.03E+04	3.09E+04		
	20	4.56E+03	4.58E+03	2.91E+03	2.98E+03	2.28E+04	2.29E+04	1.45E+04	1.49E+04	4.56E+04	4.58E+04	2.91E+04	2.98E+04		
1	4.17E+03	4.16E+03	2.67E+03	2.75E+03	2.09E+04	2.08E+04	1.33E+04	1.38E+04	4.17E+04	4.16E+04	2.67E+04	2.75E+04			
2	2.26E+03	2.19E+03	1.53E+03	1.63E+03	1.13E+04	1.10E+04	7.64E+03	8.13E+03	2.26E+04	2.19E+04	1.53E+04	1.63E+04			
3	1.30E+03	1.24E+03	9.67E+02	1.04E+03	6.48E+03	6.21E+03	4.83E+03	5.22E+03	1.30E+04	1.24E+04	9.67E+03	1.04E+04			
4	8.93E+02	8.49E+02	7.33E+02	7.99E+02	4.46E+03	4.25E+03	3.66E+03	3.99E+03	8.93E+03	8.49E+03	7.33E+03	7.99E+03			
5	7.33E+02	6.95E+02	6.39E+02	6.99E+02	3.66E+03	3.47E+03	3.19E+03	3.49E+03	7.33E+03	6.95E+03	6.39E+03	6.99E+03			
6	6.68E+02	6.32E+02	5.99E+02	6.57E+02	3.34E+03	3.16E+03	3.00E+03	3.28E+03	6.68E+03	6.32E+03	5.99E+03	6.57E+03			
7	6.40E+02	6.05E+02	5.81E+02	6.37E+02	3.20E+03	3.03E+03	2.90E+03	3.19E+03	6.40E+03	6.05E+03	5.81E+03	6.37E+03			
8	6.25E+02	5.91E+02	5.70E+02	6.26E+02	3.13E+03	2.96E+03	2.85E+03	3.13E+03	6.25E+03	5.91E+03	5.70E+03	6.26E+03			
9	6.16E+02	5.82E+02	5.63E+02	6.18E+02	3.08E+03	2.91E+03	2.81E+03	3.09E+03	6.16E+03	5.82E+03	5.63E+03	6.18E+03			
10	6.09E+02	5.75E+02	5.57E+02	6.11E+02	3.04E+03	2.87E+03	2.78E+03	3.05E+03	6.09E+03	5.75E+03	5.57E+03	6.11E+03			
15	5.79E+02	5.47E+02	5.30E+02	5.81E+02	2.90E+03	2.73E+03	2.65E+03	2.91E+03	5.79E+03	5.47E+03	5.30E+03	5.81E+03			
20	5.54E+02	5.23E+02	5.07E+02	5.56E+02	2.77E+03	2.61E+03	2.53E+03	2.78E+03	5.54E+03	5.23E+03	5.07E+03	5.56E+03			
25	5.32E+02	5.02E+02	4.88E+02	5.35E+02	2.66E+03	2.51E+03	2.44E+03	2.67E+03	5.32E+03	5.02E+03	4.88E+03	5.35E+03			
30	5.11E+02	4.82E+02	4.68E+02	5.14E+02	2.56E+03	2.41E+03	2.34E+03	2.57E+03	5.11E+03	4.82E+03	4.68E+03	5.14E+03			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	1.91E+03	1.91E+03	1.37E+03	1.37E+03	9.53E+03	9.53E+03	6.85E+03	6.85E+03	1.91E+04	1.91E+04	1.37E+04	1.37E+04		
	1	1.90E+03	1.90E+03	1.43E+03	1.43E+03	9.50E+03	9.50E+03	7.16E+03	7.16E+03	1.90E+04	1.90E+04	1.43E+04	1.43E+04		
	2	1.87E+03	1.87E+03	1.40E+03	1.40E+03	9.37E+03	9.37E+03	6.99E+03	6.99E+03	1.87E+04	1.87E+04	1.40E+04	1.40E+04		
	4	1.81E+03	1.81E+03	1.30E+03	1.30E+03	9.04E+03	9.04E+03	6.49E+03	6.49E+03	1.81E+04	1.81E+04	1.30E+04	1.30E+04		
	6	1.75E+03	1.75E+03	1.22E+03	1.22E+03	8.75E+03	8.75E+03	6.09E+03	6.09E+03	1.75E+04	1.75E+04	1.22E+04	1.22E+04		
	8	1.70E+03	1.70E+03	1.15E+03	1.15E+03	8.50E+03	8.50E+03	5.77E+03	5.77E+03	1.70E+04	1.70E+04	1.15E+04	1.15E+04		
	10	1.65E+03	1.65E+03	1.10E+03	1.10E+03	8.27E+03	8.27E+03	5.50E+03	5.50E+03	1.65E+04	1.65E+04	1.10E+04	1.10E+04		
	12	1.61E+03	1.61E+03	1.05E+03	1.05E+03	8.03E+03	8.03E+03	5.26E+03	5.26E+03	1.61E+04	1.61E+04	1.05E+04	1.05E+04		
	14	1.56E+03	1.56E+03	1.01E+03	1.01E+03	7.78E+03	7.78E+03	5.04E+03	5.04E+03	1.56E+04	1.56E+04	1.01E+04	1.01E+04		
	16	1.50E+03	1.50E+03	9.67E+02	9.67E+02	7.52E+03	7.52E+03	4.84E+03	4.84E+03	1.50E+04	1.50E+04	9.67E+03	9.67E+03		
	18	1.45E+03	1.45E+03	9.27E+02	9.27E+02	7.25E+03	7.25E+03	4.64E+03	4.64E+03	1.45E+04	1.45E+04	9.27E+03	9.27E+03		
	20	1.39E+03	1.39E+03	8.88E+02	8.88E+02	6.97E+03	6.97E+03	4.44E+03	4.44E+03	1.39E+04	1.39E+04	8.88E+03	8.88E+03		
1	1.28E+03	1.28E+03	8.12E+02	8.12E+02	6.40E+03	6.40E+03	4.06E+03	4.06E+03	1.28E+04	1.28E+04	8.12E+03	8.12E+03			
2	7.00E+02	7.00E+02	4.71E+02	4.71E+02	3.50E+03	3.50E+03	2.35E+03	2.35E+03	7.00E+03	7.00E+03	4.71E+03	4.71E+03			
3	4.02E+02	4.02E+02	3.07E+02	3.07E+02	2.01E+03	2.01E+03	1.53E+03	1.53E+03	4.02E+03	4.02E+03	3.07E+03	3.07E+03			
4	2.76E+02	2.76E+02	2.38E+02	2.38E+02	1.38E+03	1.38E+03	1.19E+03	1.19E+03	2.76E+03	2.76E+03	2.38E+03	2.38E+03			
5	2.26E+02	2.26E+02	2.11E+02	2.11E+02	1.13E+03	1.13E+03	1.05E+03	1.05E+03	2.26E+03	2.26E+03	2.11E+03	2.11E+03			
6	2.06E+02	2.06E+02	1.99E+02	1.99E+02	1.03E+03	1.03E+03	9.96E+02	9.96E+02	2.06E+03	2.06E+03	1.99E+03	1.99E+03			
7	1.98E+02	1.98E+02	1.94E+02	1.94E+02	9.88E+02	9.88E+02	9.68E+02	9.68E+02	1.98E+03	1.98E+03	1.94E+03	1.94E+03			
8	1.93E+02	1.93E+02	1.90E+02	1.90E+02	9.65E+02	9.65E+02	9.52E+02	9.52E+02	1.93E+03	1.93E+03	1.90E+03	1.90E+03			
9	1.90E+02	1.90E+02	1.88E+02	1.88E+02	9.51E+02	9.51E+02	9.39E+02	9.39E+02	1.90E+03	1.90E+03	1.88E+03	1.88E+03			
10	1.88E+02	1.88E+02	1.86E+02	1.86E+02	9.39E+02	9.39E+02	9.29E+02	9.29E+02	1.88E+03						

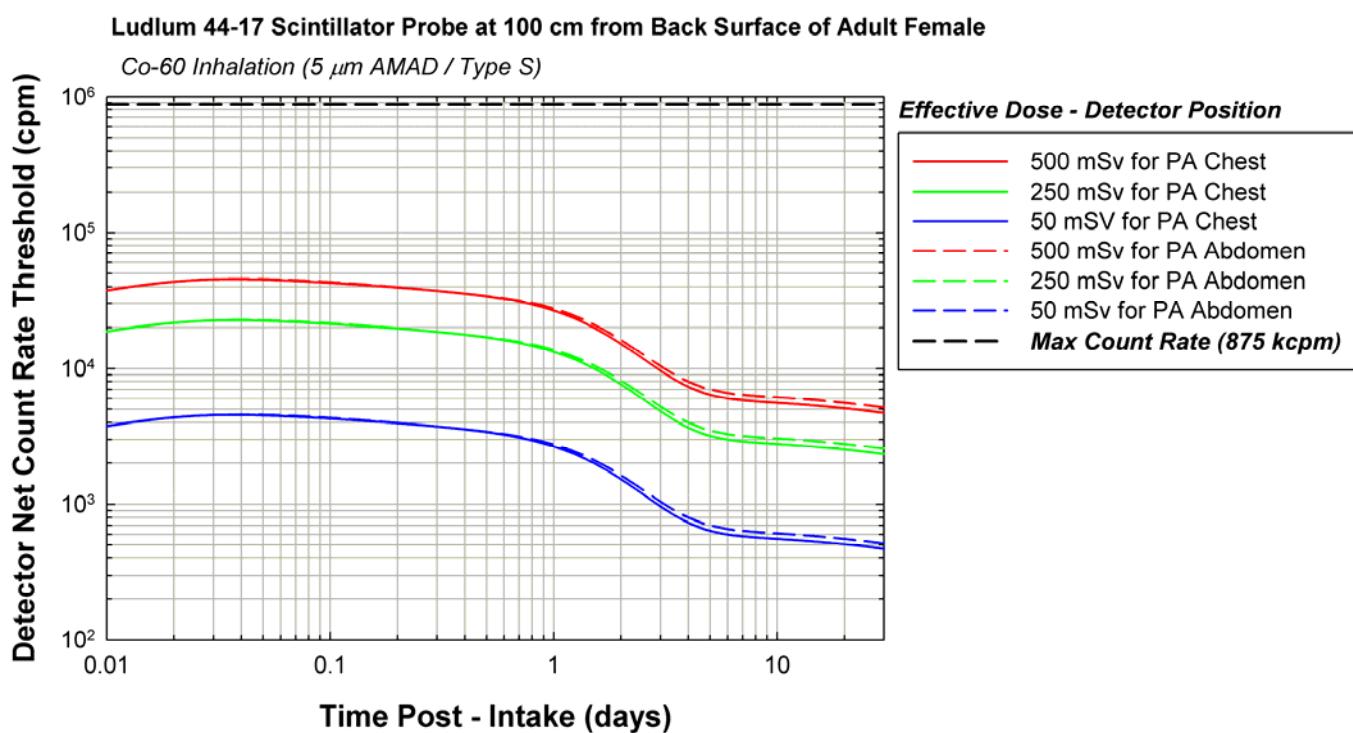
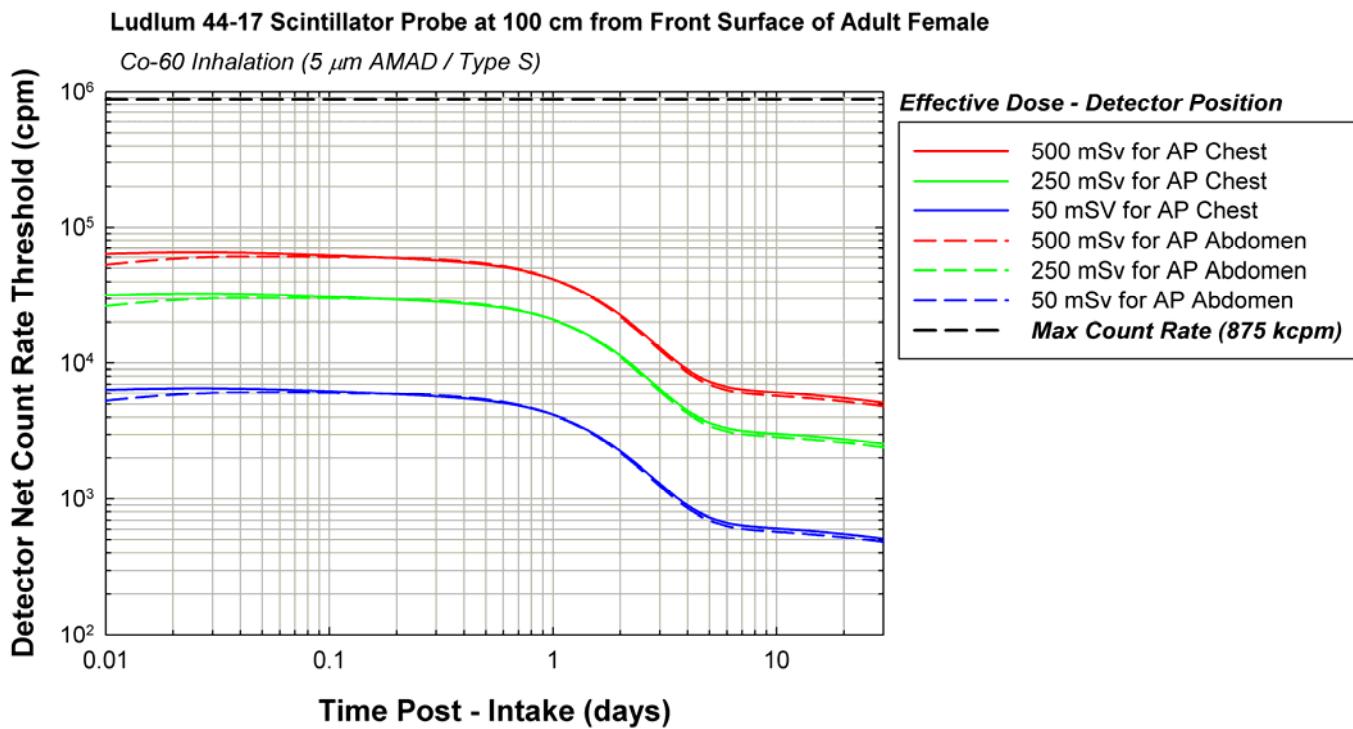
**Table D7 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 5- $\mu$ m AMAD Aerosol, Type S,  $f_A = 0.05$  **Ludlum 44-17 Scintillator Probe****



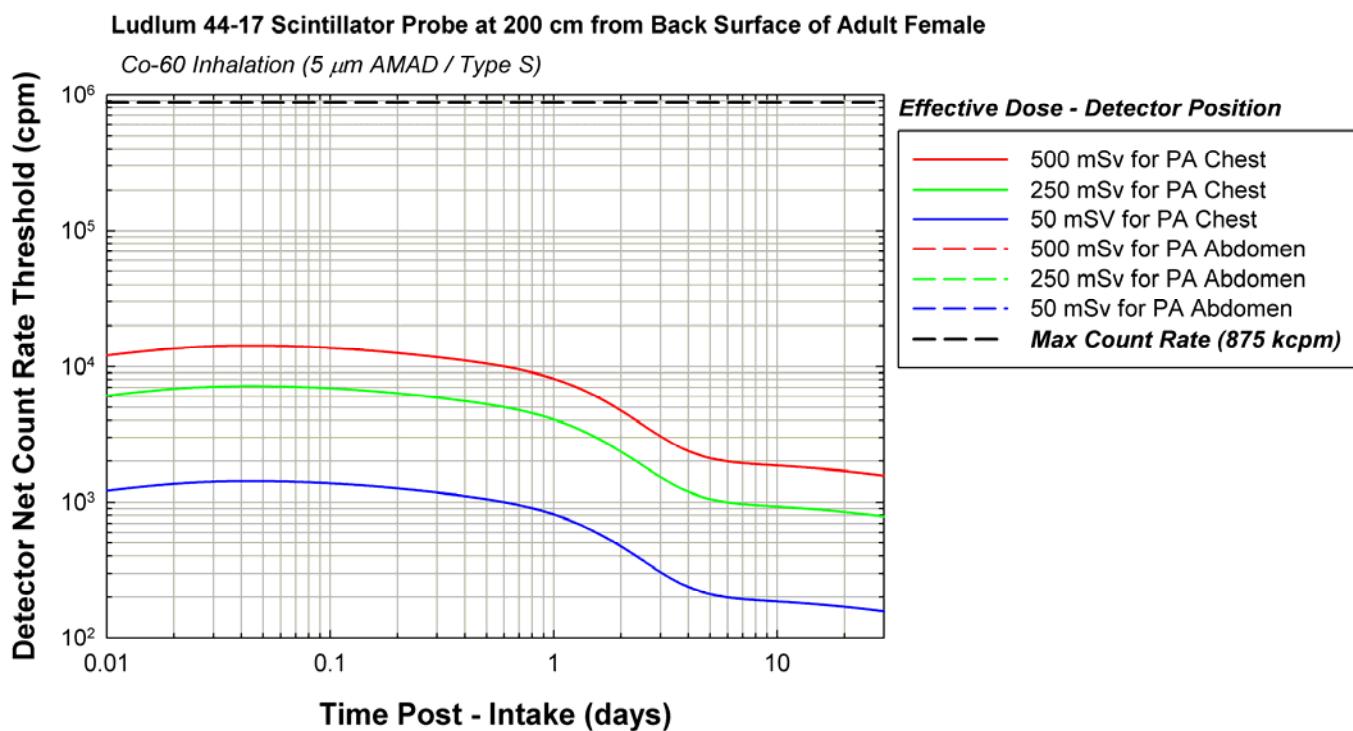
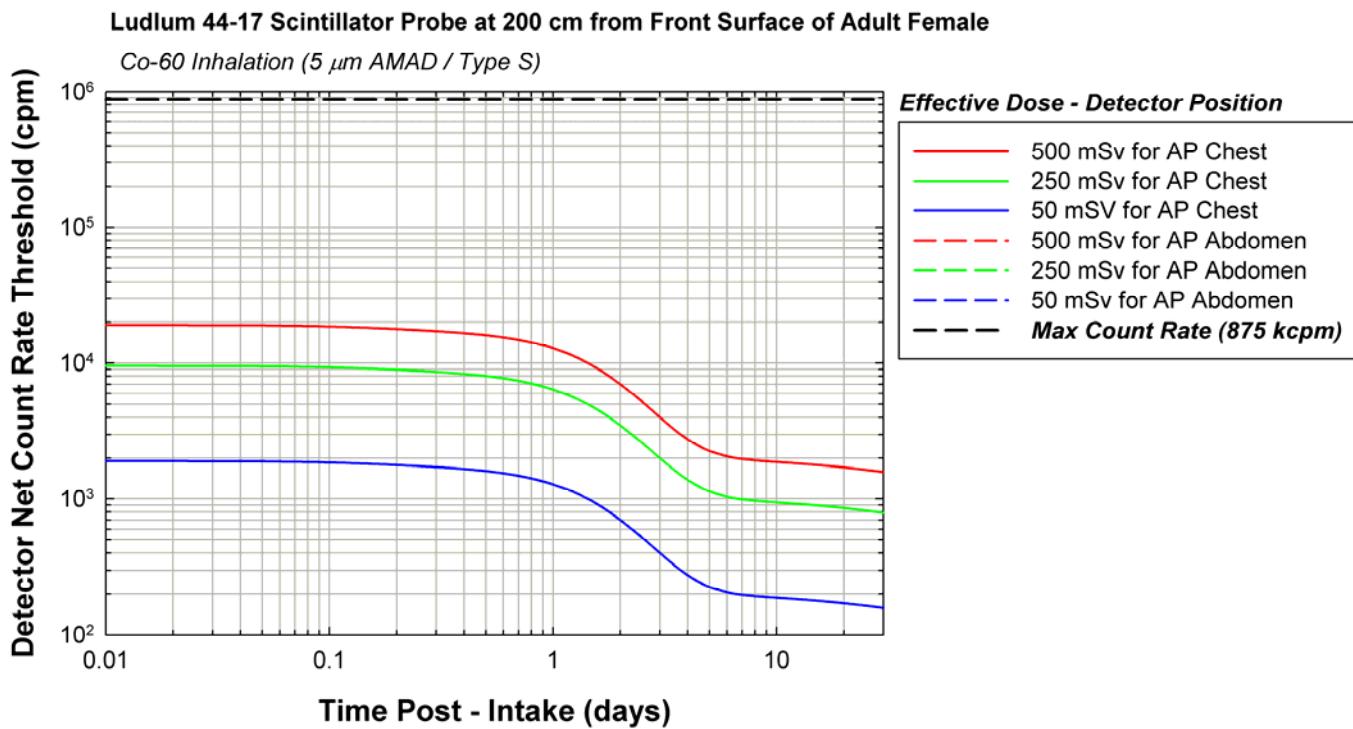
**Table D7 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 5- $\mu$ m AMAD Aerosol, Type S,  $f_A = 0.05$  **Ludlum 44-17 Scintillator Probe****



**Table D7 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 5- $\mu$ m AMAD Aerosol, Type S,  $f_A = 0.05$  **Ludlum 44-17 Scintillator Probe****



**Table D7 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Inhalation, 5-μm AMAD Aerosol, Type S,  $f_A = 0.05$  **Ludlum 44-17 Scintillator Probe****



**Table D8 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Cobalt-60, Ingestion,  $f_A = 0.10$  Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	5.30E+05	1.30E+06	3.95E+05	9.58E+05	2.65E+06	6.51E+06	1.98E+06	4.79E+06	5.30E+06	1.30E+07	3.95E+06	9.58E+06		
	1	4.40E+05	1.37E+06	3.39E+05	9.78E+05	2.20E+06	6.83E+06	1.70E+06	4.89E+06	4.40E+06	1.37E+07	3.39E+06	9.78E+06		
	2	3.55E+05	1.44E+06	2.79E+05	9.52E+05	1.78E+06	7.18E+06	1.40E+06	4.76E+06	3.55E+06	1.44E+07	2.79E+06	9.52E+06		
	4	3.19E+05	1.50E+06	2.38E+05	8.48E+05	1.59E+06	7.48E+06	1.19E+06	4.24E+06	3.19E+06	1.50E+07	2.38E+06	8.48E+06		
	6	3.16E+05	1.52E+06	2.23E+05	7.67E+05	1.58E+06	7.59E+06	1.12E+06	3.84E+06	3.16E+06	1.52E+07	2.23E+06	7.67E+06		
	8	3.14E+05	1.52E+06	2.14E+05	7.14E+05	1.57E+06	7.62E+06	1.07E+06	3.57E+06	3.14E+06	1.52E+07	2.14E+06	7.14E+06		
	10	3.09E+05	1.51E+06	2.06E+05	6.75E+05	1.55E+06	7.57E+06	1.03E+06	3.38E+06	3.09E+06	1.51E+07	2.06E+06	6.75E+06		
	12	3.02E+05	1.49E+06	1.99E+05	6.45E+05	1.51E+06	7.46E+06	9.94E+05	3.22E+06	3.02E+06	1.49E+07	1.99E+06	6.45E+06		
	14	2.93E+05	1.46E+06	1.91E+05	6.18E+05	1.46E+06	7.29E+06	9.57E+05	3.09E+06	2.93E+06	1.46E+07	1.91E+06	6.18E+06		
	16	2.82E+05	1.42E+06	1.84E+05	5.93E+05	1.41E+06	7.08E+06	9.19E+05	2.97E+06	2.82E+06	1.42E+07	1.84E+06	5.93E+06		
	18	2.71E+05	1.37E+06	1.76E+05	5.68E+05	1.36E+06	6.85E+06	8.80E+05	2.84E+06	2.71E+06	1.37E+07	1.76E+06	5.68E+06		
	20	2.59E+05	1.32E+06	1.68E+05	5.43E+05	1.30E+06	6.59E+06	8.41E+05	2.72E+06	2.59E+06	1.32E+07	1.68E+06	5.43E+06		
1		2.35E+05	1.20E+06	1.52E+05	4.93E+05	1.18E+06	6.02E+06	7.62E+05	2.47E+06	2.35E+06	1.20E+07	1.52E+06	4.93E+06		
2		1.13E+05	5.86E+05	7.49E+04	2.42E+05	5.67E+05	2.93E+06	3.74E+05	1.21E+06	1.13E+06	5.86E+06	7.49E+05	2.42E+06		
3		5.28E+04	2.57E+05	3.64E+04	1.12E+05	2.64E+05	1.28E+06	1.82E+05	5.59E+05	5.28E+05	2.57E+06	3.64E+05	1.12E+06		
4		2.77E+04	1.18E+05	2.04E+04	5.70E+04	1.38E+05	5.88E+05	1.02E+05	2.85E+05	2.77E+05	1.18E+06	2.04E+05	5.70E+05		
5		1.76E+04	6.23E+04	1.39E+04	3.49E+04	8.81E+04	3.12E+05	6.95E+04	1.75E+05	1.76E+05	6.23E+05	1.39E+05	3.49E+05		
6		1.35E+04	4.04E+04	1.11E+04	2.59E+04	6.73E+04	2.02E+05	5.57E+04	1.29E+05	1.35E+05	4.04E+05	1.11E+05	2.59E+05		
7		1.16E+04	3.14E+04	9.79E+03	2.18E+04	5.78E+04	1.57E+05	4.90E+04	1.09E+05	1.16E+05	3.14E+05	9.79E+04	2.18E+05		
8		1.05E+04	2.72E+04	9.01E+03	1.97E+04	5.26E+04	1.36E+05	4.51E+04	9.86E+04	1.05E+05	2.72E+05	9.01E+04	1.97E+05		
9		9.85E+03	2.49E+04	8.47E+03	1.84E+04	4.93E+04	1.24E+05	4.24E+04	9.20E+04	9.85E+04	2.49E+05	8.47E+04	1.84E+05		
10		9.34E+03	2.34E+04	8.04E+03	1.74E+04	4.67E+04	1.17E+05	4.02E+04	8.70E+04	9.34E+04	2.34E+05	8.04E+04	1.74E+05		
15		7.98E+03	1.99E+04	6.88E+03	1.49E+04	3.99E+04	9.93E+04	3.44E+04	7.43E+04	7.98E+04	1.99E+05	6.88E+04	1.49E+05		
20		6.62E+03	1.64E+04	5.72E+03	1.23E+04	3.31E+04	8.18E+04	2.86E+04	6.16E+04	6.62E+04	1.64E+05	5.72E+04	1.23E+05		
25		6.10E+03	1.50E+04	5.27E+03	1.13E+04	3.05E+04	7.52E+04	2.64E+04	5.67E+04	6.10E+04	1.50E+05	5.27E+04	1.13E+05		
30		5.58E+03	1.37E+04	4.82E+03	1.04E+04	2.79E+04	6.86E+04	2.41E+04	5.18E+04	5.58E+04	1.37E+05	4.82E+04	1.04E+05		

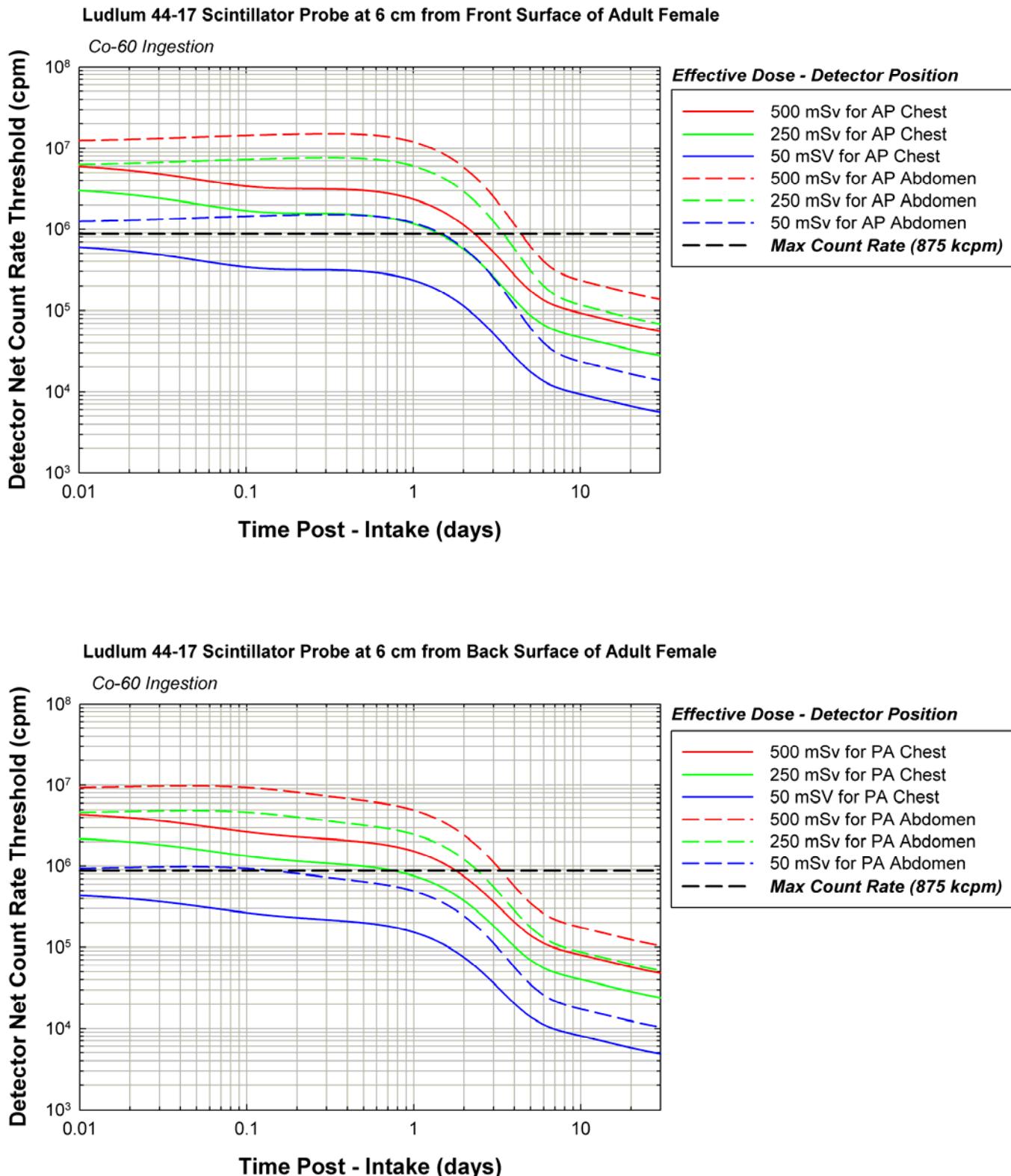
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	2.60E+05	3.40E+05	1.73E+05	2.71E+05	1.30E+06	1.70E+06	8.64E+05	1.36E+06	2.60E+06	3.40E+06	1.73E+06	2.71E+06		
	1	2.36E+05	3.46E+05	1.60E+05	2.66E+05	1.18E+06	1.73E+06	8.00E+05	1.33E+06	2.36E+06	3.46E+06	1.60E+06	2.66E+06		
	2	2.13E+05	3.51E+05	1.44E+05	2.52E+05	1.06E+06	1.75E+06	7.22E+05	1.26E+06	2.13E+06	3.51E+06	1.44E+06	2.52E+06		
	4	2.01E+05	3.49E+05	1.30E+05	2.28E+05	1.01E+06	1.74E+06	6.48E+05	1.14E+06	2.01E+06	3.49E+06	1.30E+06	2.28E+06		
	6	1.99E+05	3.44E+05	1.22E+05	2.11E+05	9.96E+05	1.72E+06	6.09E+05	1.05E+06	1.99E+06	3.44E+06	1.22E+06	2.11E+06		
	8	1.97E+05	3.38E+05	1.16E+05	1.99E+05	9.87E+05	1.69E+06	5.82E+05	9.94E+05	1.97E+06	3.38E+06	1.16E+06	1.99E+06		
	10	1.95E+05	3.31E+05	1.12E+05	1.89E+05	9.73E+05	1.65E+06	5.59E+05	9.47E+05	1.95E+06	3.31E+06	1.12E+06	1.89E+06		
	12	1.91E+05	3.22E+05	1.08E+05	1.81E+05	9.53E+05	1.61E+06	5.38E+05	9.07E+05	1.91E+06	3.22E+06	1.08E+06	1.81E+06		
	14	1.86E+05	3.11E+05	1.03E+05	1.74E+05	9.28E+05	1.56E+06	5.16E+05	8.70E+05	1.86E+06	3.11E+06	1.03E+06	1.74E+06		
	16	1.80E+05	3.00E+05	9.90E+04	1.67E+05	8.99E+05	1.50E+06	4.95E+05	8.33E+05	1.80E+06	3.00E+06	9.90E+05	1.67E+06		
	18	1.73E+05	2.88E+05	9.47E+04	1.59E+05	8.66E+05	1.44E+06	4.74E+05	7.97E+05	1.73E+06	2.88E+06	9.47E+05	1.59E+06		
	20	1.66E+05	2.76E+05	9.04E+04	1.52E+05	8.32E+05	1.38E+06	4.52E+05	7.60E+05	1.66E+06	2.76E+06	9.04E+05	1.52E+06		
1		1.52E+05	2.50E+05	8.17E+04	1.37E+05	7.59E+05	1.25E+06	4.09E+05	6.87E+05	1.52E+06	2.50E+06	8.17E+05	1.37E+06		
2		7.42E+04	1.19E+05	3.99E+04	6.66E+04	3.71E+05	5.95E+05	1.99E+05	3.33E+05	7.42E+05	1.19E+06	3.99E+05	6.66E+05		
3		3.39E+04	5.27E+04	1.91E+04	3.11E+04	1.69E+05	2.64E+05	9.56E+04	1.56E+05	3.39E+05	5.27E+05	1.91E+05	3.11E+05		
4		1.69E+04	2.50E+04	1.04E+04	1.63E+04	8.43E+04	1.25E+05	5.22E+04	8.13E+04	1.69E+05	2.50E+05	1.04E+05	1.63E+05		
5		1.01E+04	1.40E+04	6.91E+03	1.03E+04	5.03E+04	6.99E+04	3.46E+04	5.13E+04	1.01E+05	1.40E+05	6.91E+04	1.03E+05		
6		7.29E+03	9.57E+03	5.42E+03	7.78E+03	3.64E+04	4.79E+04	2.71E+04	3.89E+04	7.29E+04	9.57E+04	5.42E+04	7.78E+04		
7		6.07E+03	7.70E+03	4.72E+03	6.65E+03	3.04E+04	3.85E+04	2.36E+04	3.32E+04	6.07E+04	7.70E+04	4.72E+04	6.65E+04		
8		5.45E+03	6.80E+03	4.33E+03	6.04E+03	2.73E+04	3.40E+04	2.16E+04	3.02E+04	5.45E+04	6.80E+04	4.33E+04	6.04E+04		
9		5.07E+03	6.28E+03	4.06E+03	5.64E+03	2.54E+04	3.14E+04	2.03E+04	2.82E+04	5.07E+04	6.28E+04	4.06E+04	5.64E+04		
10		4.79E+03	5.92E+03	3.85E+03											

**Table D8 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Cobalt-60, Ingestion,  $f_A = 0.10$  **Ludlum 44-17 Scintillator Probe****

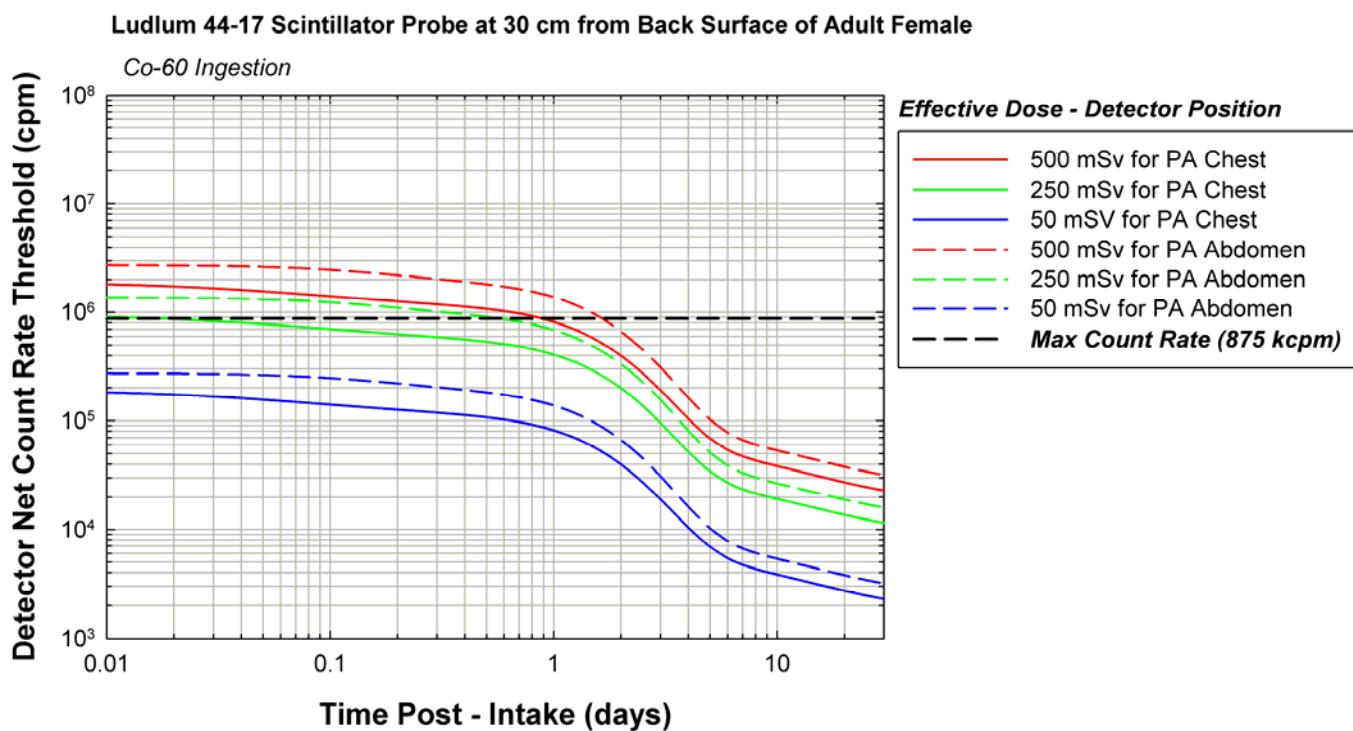
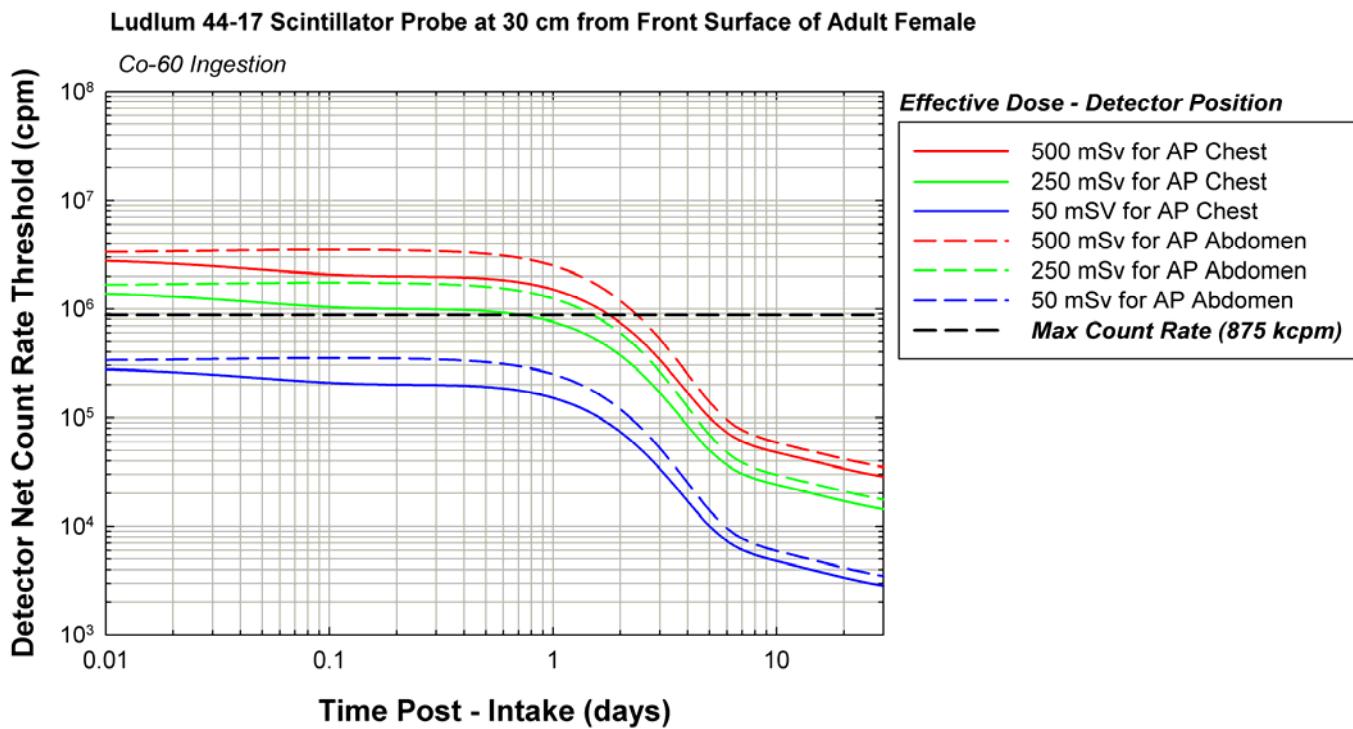
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	5.21E+04	5.45E+04	4.04E+04	4.24E+04	2.61E+05	2.72E+05	2.02E+05	2.12E+05	5.21E+05	5.45E+05	4.04E+05	4.24E+05		
	1	5.07E+04	5.40E+04	3.87E+04	4.11E+04	2.54E+05	2.70E+05	1.94E+05	2.05E+05	5.07E+05	5.40E+05	3.87E+05	4.11E+05		
	2	4.89E+04	5.36E+04	3.64E+04	3.87E+04	2.44E+05	2.68E+05	1.82E+05	1.94E+05	4.89E+05	5.36E+05	3.64E+05	3.87E+05		
	4	4.70E+04	5.33E+04	3.36E+04	3.52E+04	2.35E+05	2.67E+05	1.68E+05	1.76E+05	4.70E+05	5.33E+05	3.36E+05	3.52E+05		
	6	4.59E+04	5.27E+04	3.19E+04	3.31E+04	2.30E+05	2.64E+05	1.60E+05	1.65E+05	4.59E+05	5.27E+05	3.19E+05	3.31E+05		
	8	4.51E+04	5.17E+04	3.07E+04	3.16E+04	2.25E+05	2.59E+05	1.53E+05	1.58E+05	4.51E+05	5.17E+05	3.07E+05	3.16E+05		
	10	4.41E+04	5.03E+04	2.95E+04	3.04E+04	2.21E+05	2.52E+05	1.47E+05	1.52E+05	4.41E+05	5.03E+05	2.95E+05	3.04E+05		
	12	4.30E+04	4.87E+04	2.84E+04	2.94E+04	2.15E+05	2.44E+05	1.42E+05	1.47E+05	4.30E+05	4.87E+05	2.84E+05	2.94E+05		
	14	4.18E+04	4.69E+04	2.73E+04	2.83E+04	2.09E+05	2.34E+05	1.36E+05	1.42E+05	4.18E+05	4.69E+05	2.73E+05	2.83E+05		
	16	4.04E+04	4.49E+04	2.62E+04	2.73E+04	2.02E+05	2.25E+05	1.31E+05	1.36E+05	4.04E+05	4.49E+05	2.62E+05	2.73E+05		
	18	3.89E+04	4.29E+04	2.50E+04	2.62E+04	1.95E+05	2.14E+05	1.25E+05	1.31E+05	3.89E+05	4.29E+05	2.50E+05	2.62E+05		
	20	3.73E+04	4.08E+04	2.38E+04	2.51E+04	1.87E+05	2.04E+05	1.19E+05	1.26E+05	3.73E+05	4.08E+05	2.38E+05	2.51E+05		
1	3.40E+04	3.67E+04	2.15E+04	2.29E+04	1.70E+05	1.84E+05	1.08E+05	1.14E+05	3.40E+05	3.67E+05	2.15E+05	2.29E+05			
2	1.67E+04	1.73E+04	1.04E+04	1.14E+04	8.33E+04	8.63E+04	5.19E+04	5.70E+04	1.67E+05	1.73E+05	1.04E+05	1.14E+05			
3	7.61E+03	7.84E+03	4.86E+03	5.48E+03	3.81E+04	3.92E+04	2.43E+04	2.74E+04	7.61E+04	7.84E+04	4.86E+04	5.48E+04			
4	3.79E+03	3.94E+03	2.56E+03	2.97E+03	1.90E+04	1.97E+04	1.28E+04	1.48E+04	3.79E+04	3.94E+04	2.56E+04	2.97E+04			
5	2.26E+03	2.38E+03	1.63E+03	1.94E+03	1.13E+04	1.19E+04	8.16E+03	9.72E+03	2.26E+04	2.38E+04	1.63E+04	1.94E+04			
6	1.64E+03	1.75E+03	1.25E+03	1.51E+03	8.20E+03	8.76E+03	6.23E+03	7.57E+03	1.64E+04	1.75E+04	1.25E+04	1.51E+04			
7	1.37E+03	1.47E+03	1.07E+03	1.31E+03	6.83E+03	7.35E+03	5.35E+03	6.56E+03	1.37E+04	1.47E+04	1.07E+04	1.31E+04			
8	1.23E+03	1.32E+03	9.74E+02	1.20E+03	6.13E+03	6.62E+03	4.87E+03	5.99E+03	1.23E+04	1.32E+04	9.74E+03	1.20E+04			
9	1.14E+03	1.23E+03	9.11E+02	1.12E+03	5.70E+03	6.17E+03	4.56E+03	5.62E+03	1.14E+04	1.23E+04	9.11E+03	1.12E+04			
10	1.08E+03	1.17E+03	8.63E+02	1.07E+03	5.39E+03	5.83E+03	4.32E+03	5.33E+03	1.08E+04	1.17E+04	8.63E+03	1.07E+04			
15	8.80E+02	9.53E+02	7.06E+02	8.72E+02	4.40E+03	4.76E+03	3.53E+03	4.36E+03	8.80E+03	9.53E+03	7.06E+03	8.72E+03			
20	7.62E+02	8.25E+02	6.12E+02	7.56E+02	3.81E+03	4.12E+03	3.06E+03	3.78E+03	7.62E+03	8.25E+03	6.12E+03	7.56E+03			
25	7.01E+02	7.59E+02	5.64E+02	6.97E+02	3.51E+03	3.80E+03	2.82E+03	3.48E+03	7.01E+03	7.59E+03	5.64E+03	6.97E+03			
30	6.41E+02	6.94E+02	5.15E+02	6.37E+02	3.20E+03	3.47E+03	2.58E+03	3.18E+03	6.41E+03	6.94E+03	5.15E+03	6.37E+03			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	1.50E+04	1.50E+04	1.28E+04	1.28E+04	7.50E+04	7.50E+04	6.39E+04	6.39E+04	1.50E+05	1.50E+05	1.28E+05	1.28E+05		
	1	1.50E+04	1.50E+04	1.26E+04	1.26E+04	7.51E+04	7.51E+04	6.31E+04	6.31E+04	1.50E+05	1.50E+05	1.26E+05	1.26E+05		
	2	1.49E+04	1.49E+04	1.21E+04	1.21E+04	7.43E+04	7.43E+04	6.04E+04	6.04E+04	1.49E+05	1.49E+05	1.21E+05	1.21E+05		
	4	1.44E+04	1.44E+04	1.10E+04	1.10E+04	7.21E+04	7.21E+04	5.49E+04	5.49E+04	1.44E+05	1.44E+05	1.10E+05	1.10E+05		
	6	1.41E+04	1.41E+04	1.02E+04	1.02E+04	7.04E+04	7.04E+04	5.09E+04	5.09E+04	1.41E+05	1.41E+05	1.02E+05	1.02E+05		
	8	1.38E+04	1.38E+04	9.58E+03	9.58E+03	6.91E+04	6.91E+04	4.79E+04	4.79E+04	1.38E+05	1.38E+05	9.58E+04	9.58E+04		
	10	1.35E+04	1.35E+04	9.09E+03	9.09E+03	6.77E+04	6.77E+04	4.55E+04	4.55E+04	1.35E+05	1.35E+05	9.09E+04	9.09E+04		
	12	1.32E+04	1.32E+04	8.67E+03	8.67E+03	6.62E+04	6.62E+04	4.33E+04	4.33E+04	1.32E+05	1.32E+05	8.67E+04	8.67E+04		
	14	1.29E+04	1.29E+04	8.28E+03	8.28E+03	6.44E+04	6.44E+04	4.14E+04	4.14E+04	1.29E+05	1.29E+05	8.28E+04	8.28E+04		
	16	1.25E+04	1.25E+04	7.89E+03	7.89E+03	6.24E+04	6.24E+04	3.95E+04	3.95E+04	1.25E+05	1.25E+05	7.89E+04	7.89E+04		
	18	1.20E+04	1.20E+04	7.52E+03	7.52E+03	6.02E+04	6.02E+04	3.76E+04	3.76E+04	1.20E+05	1.20E+05	7.52E+04	7.52E+04		
	20	1.16E+04	1.16E+04	7.15E+03	7.15E+03	5.79E+04	5.79E+04	3.58E+04	3.58E+04	1.16E+05	1.16E+05	7.15E+04	7.15E+04		
1	1.06E+04	1.06E+04	6.43E+03	6.43E+03	5.29E+04	5.29E+04	3.22E+04	3.22E+04	1.06E+05	1.06E+05	6.43E+04	6.43E+04			
2	5.20E+03	5.20E+03	3.09E+03	3.09E+03	2.60E+04	2.60E+04	1.55E+04	1.55E+04	5.20E+04	5.20E+04	3.09E+04	3.09E+04			
3	2.36E+03	2.36E+03	1.47E+03	1.47E+03	1.18E+04	1.18E+04	7.37E+03	7.37E+03	2.36E+04	2.36E+04	1.47E+04	1.47E+04			
4	1.16E+03	1.16E+03	7.99E+02	7.99E+02	5.79E+03	5.79E+03	4.00E+03	4.00E+03	1.16E+04	1.16E+04	7.99E+03	7.99E+03			
5	6.77E+02	6.77E+02	5.26E+02	5.26E+02	3.39E+03	3.39E+03	2.63E+03	2.63E+03	6.77E+03	6.77E+03	5.26E+03	5.26E+03			
6	4.82E+02	4.82E+02	4.11E+02	4.11E+02	2.41E+03	2.41E+03	2.06E+03	2.06E+03	4.82E+03	4.82E+03	4.11E+03	4.11E+03			
7	3.97E+02	3.97E+02	3.57E+02	3.57E+02	1.99E+03	1.99E+03	1.79E+03	1.79E+03	3.97E+03	3.97E+03	3.57E+03	3.57E+03			
8	3.55E+02	3.55E+02	3.27E+02	3.27E+02	1.77E+03	1.77E+03	1.63E+03	1.63E+03	3.55E+03	3.55E+03	3.27E+03	3.27E+03			
9	3.29E+02	3.29E+02	3.06E+02	3.06E+02	1.65E+03	1.65E+03	1.53E+03	1.53E+03	3.29E+03	3.29E+03	3.06E+03	3.06E+03			
10	3.11E+02	3.11E+02	2.91E+02	2.91E+02	1.55E+03	1.55E+03	1.45E+03	1.45E+03	3.11E+03	3.11E					

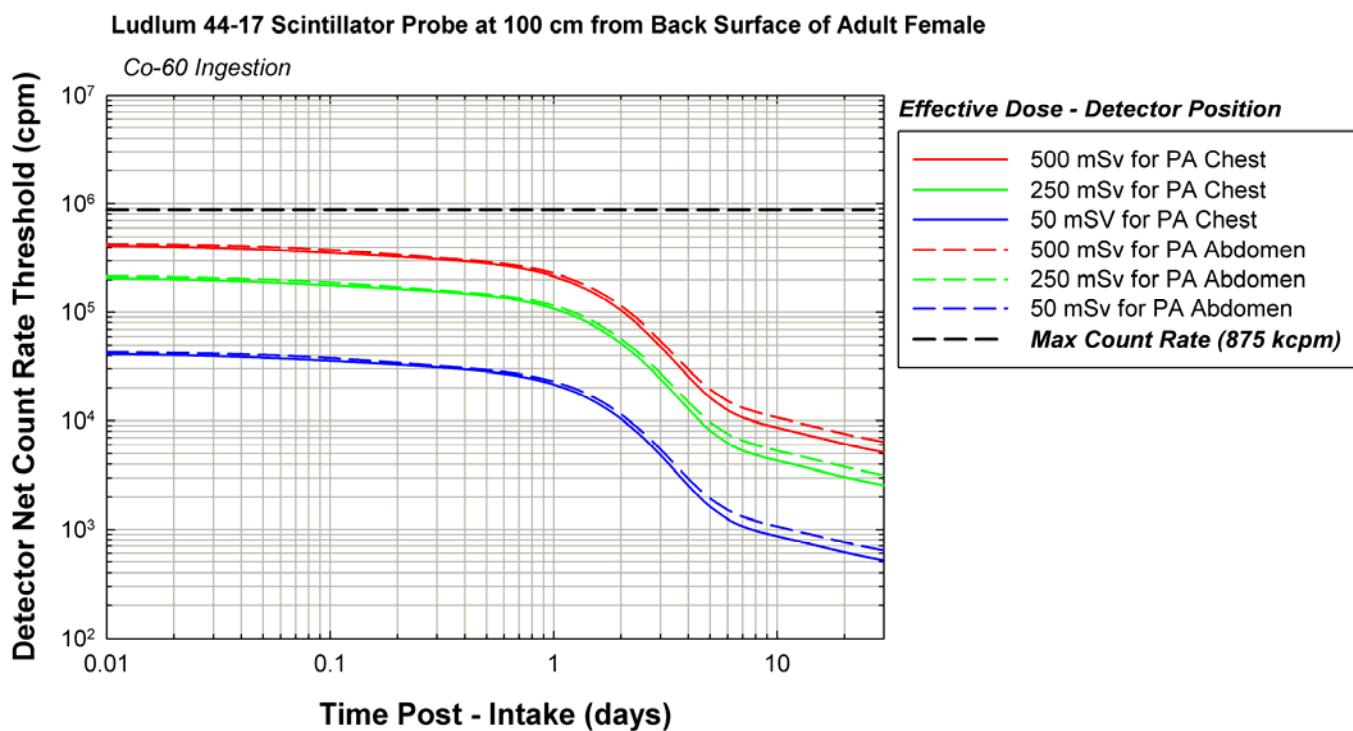
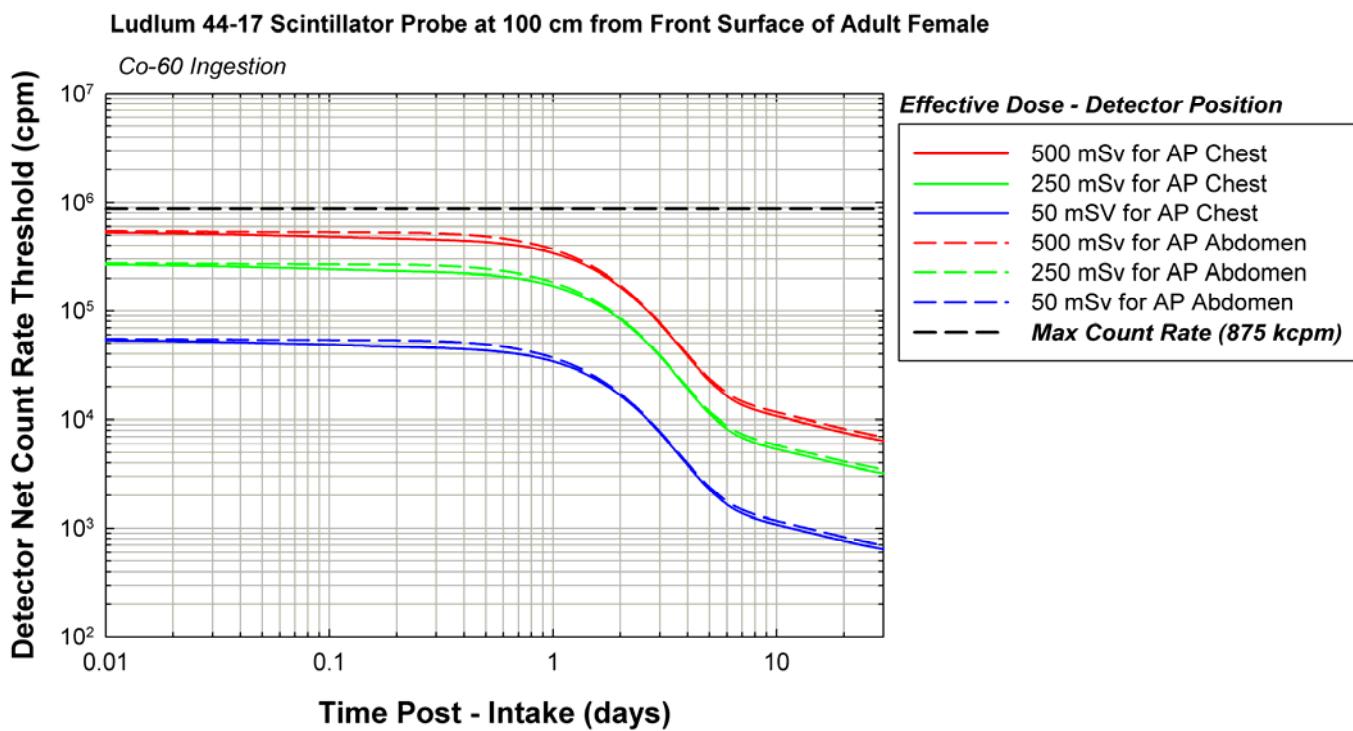
**Table D8** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
**Cobalt-60, Ingestion,  $f_A = 0.10$  Ludlum 44-17 Scintillator Probe**



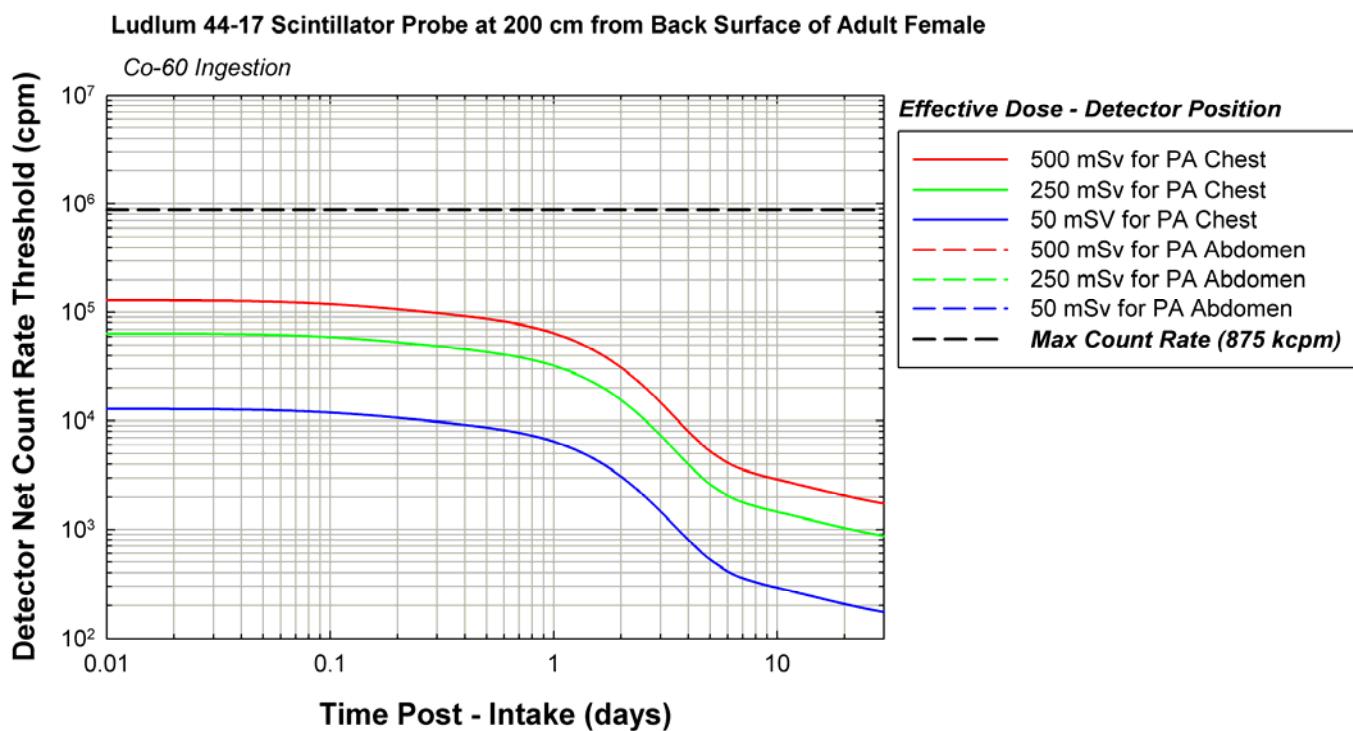
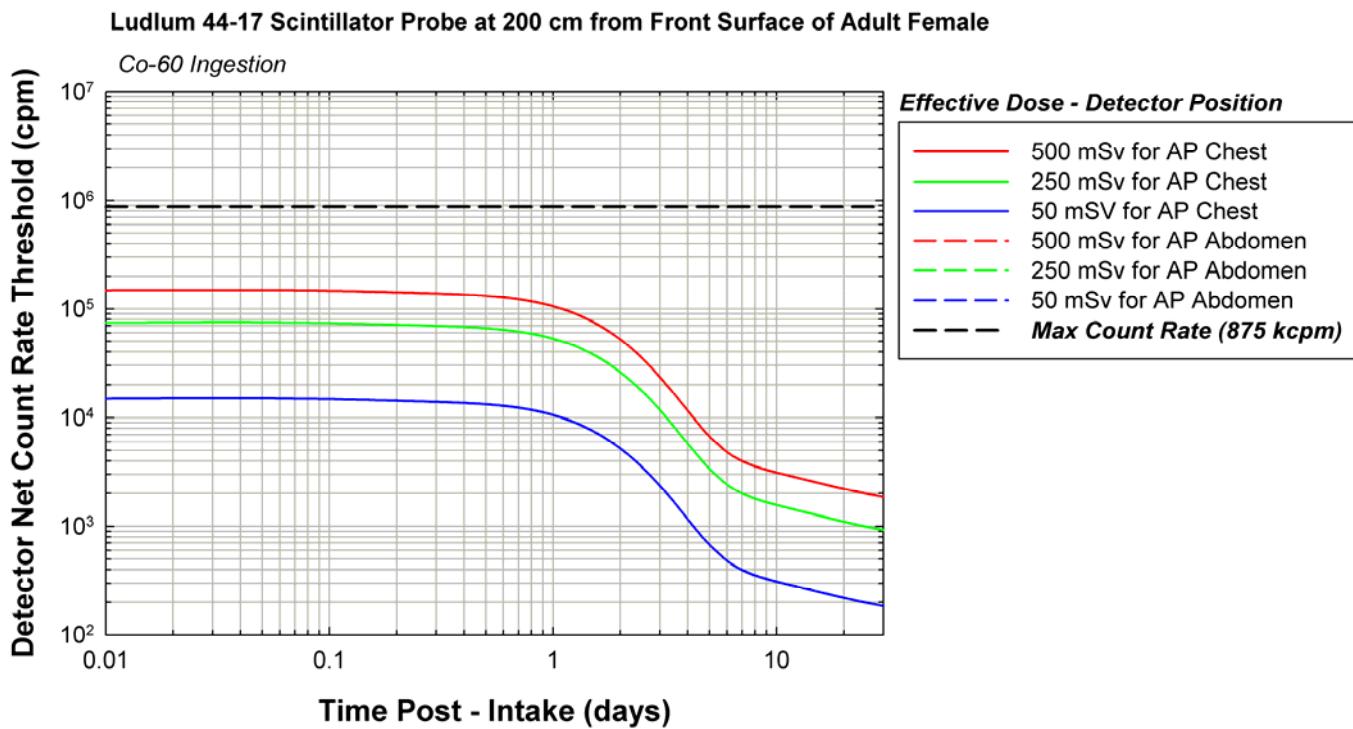
**Table D8 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Ingestion,  $f_A = 0.10$  **Ludlum 44-17 Scintillator Probe****



**Table D8 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Ingestion,  $f_A = 0.10$  **Ludlum 44-17 Scintillator Probe****



**Table D8 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cobalt-60, Ingestion,  $f_A = 0.10$  **Ludlum 44-17 Scintillator Probe****



**Table D9 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Cesium-137, Inhalation, 1-μm AMAD Aerosol, Type F, f<sub>A</sub> = 1.00 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	1.76E+05	1.13E+05	1.08E+05	8.52E+04	8.82E+05	5.64E+05	5.42E+05	4.26E+05	1.76E+06	1.13E+06	1.08E+06	8.52E+05		
	1	1.75E+05	1.11E+05	1.07E+05	8.34E+04	8.76E+05	5.54E+05	5.33E+05	4.17E+05	1.75E+06	1.11E+06	1.07E+06	8.34E+05		
	2	1.67E+05	1.06E+05	1.02E+05	7.99E+04	8.36E+05	5.31E+05	5.11E+05	4.00E+05	1.67E+06	1.06E+06	1.02E+06	7.99E+05		
	4	1.46E+05	1.05E+05	9.01E+04	7.86E+04	7.28E+05	5.26E+05	4.50E+05	3.93E+05	1.46E+06	1.05E+06	9.01E+05	7.86E+05		
	6	1.26E+05	1.06E+05	7.90E+04	7.89E+04	6.28E+05	5.31E+05	3.95E+05	3.94E+05	1.26E+06	1.06E+06	7.90E+05	7.89E+05		
	8	1.09E+05	1.07E+05	7.00E+04	7.92E+04	5.46E+05	5.37E+05	3.50E+05	3.96E+05	1.09E+06	1.07E+06	7.00E+05	7.92E+05		
	10	9.59E+04	1.08E+05	6.27E+04	7.95E+04	4.80E+05	5.41E+05	3.14E+05	3.97E+05	9.59E+05	1.08E+06	6.27E+05	7.95E+05		
	12	8.50E+04	1.09E+05	5.68E+04	7.96E+04	4.25E+05	5.44E+05	2.84E+05	3.98E+05	8.50E+05	1.09E+06	5.68E+05	7.96E+05		
	14	7.64E+04	1.09E+05	5.21E+04	7.97E+04	3.82E+05	5.46E+05	2.61E+05	3.98E+05	7.64E+05	1.09E+06	5.21E+05	7.97E+05		
	16	6.92E+04	1.09E+05	4.83E+04	7.97E+04	3.46E+05	5.47E+05	2.42E+05	3.98E+05	6.92E+05	1.09E+06	4.83E+05	7.97E+05		
	18	6.33E+04	1.09E+05	4.52E+04	7.96E+04	3.17E+05	5.47E+05	2.26E+05	3.98E+05	6.33E+05	1.09E+06	4.52E+05	7.96E+05		
	20	5.84E+04	1.09E+05	4.26E+04	7.95E+04	2.92E+05	5.47E+05	2.13E+05	3.98E+05	5.84E+05	1.09E+06	4.26E+05	7.95E+05		
1	5.10E+04	1.09E+05	3.88E+04	7.92E+04	2.55E+05	5.46E+05	1.94E+05	3.96E+05	5.10E+05	1.09E+06	3.88E+05	7.92E+05			
2	3.50E+04	1.06E+05	3.11E+04	7.70E+04	1.75E+05	5.31E+05	1.56E+05	3.85E+05	3.50E+05	1.06E+06	3.11E+05	7.70E+05			
3	3.13E+04	1.03E+05	2.94E+04	7.50E+04	1.56E+05	5.16E+05	1.47E+05	3.75E+05	3.13E+05	1.03E+06	2.94E+05	7.50E+05			
4	2.97E+04	1.01E+05	2.85E+04	7.34E+04	1.48E+05	5.04E+05	1.43E+05	3.67E+05	2.97E+05	1.01E+06	2.85E+05	7.34E+05			
5	2.89E+04	9.89E+04	2.79E+04	7.22E+04	1.44E+05	4.95E+05	1.40E+05	3.61E+05	2.89E+05	9.89E+05	2.79E+05	7.22E+05			
6	2.83E+04	9.74E+04	2.75E+04	7.12E+04	1.42E+05	4.87E+05	1.38E+05	3.56E+05	2.83E+05	9.74E+05	2.75E+05	7.12E+05			
7	2.79E+04	9.61E+04	2.72E+04	7.03E+04	1.40E+05	4.80E+05	1.36E+05	3.52E+05	2.79E+05	9.61E+05	2.72E+05	7.03E+05			
8	2.76E+04	9.50E+04	2.69E+04	6.96E+04	1.38E+05	4.75E+05	1.35E+05	3.48E+05	2.76E+05	9.50E+05	2.69E+05	6.96E+05			
9	2.74E+04	9.41E+04	2.67E+04	6.89E+04	1.37E+05	4.70E+05	1.33E+05	3.45E+05	2.74E+05	9.41E+05	2.67E+05	6.89E+05			
10	2.71E+04	9.32E+04	2.64E+04	6.83E+04	1.36E+05	4.66E+05	1.32E+05	3.42E+05	2.71E+05	9.32E+05	2.64E+05	6.83E+05			
15	2.62E+04	9.01E+04	2.56E+04	6.61E+04	1.31E+05	4.51E+05	1.28E+05	3.30E+05	2.62E+05	9.01E+05	2.56E+05	6.61E+05			
20	2.53E+04	8.70E+04	2.47E+04	6.38E+04	1.27E+05	4.35E+05	1.23E+05	3.19E+05	2.53E+05	8.70E+05	2.47E+05	6.38E+05			
25	2.46E+04	8.43E+04	2.39E+04	6.18E+04	1.23E+05	4.21E+05	1.20E+05	3.09E+05	2.46E+05	8.43E+05	2.39E+05	6.18E+05			
30	2.38E+04	8.16E+04	2.32E+04	5.99E+04	1.19E+05	4.08E+05	1.16E+05	2.99E+05	2.38E+05	8.16E+05	2.32E+05	5.99E+05			

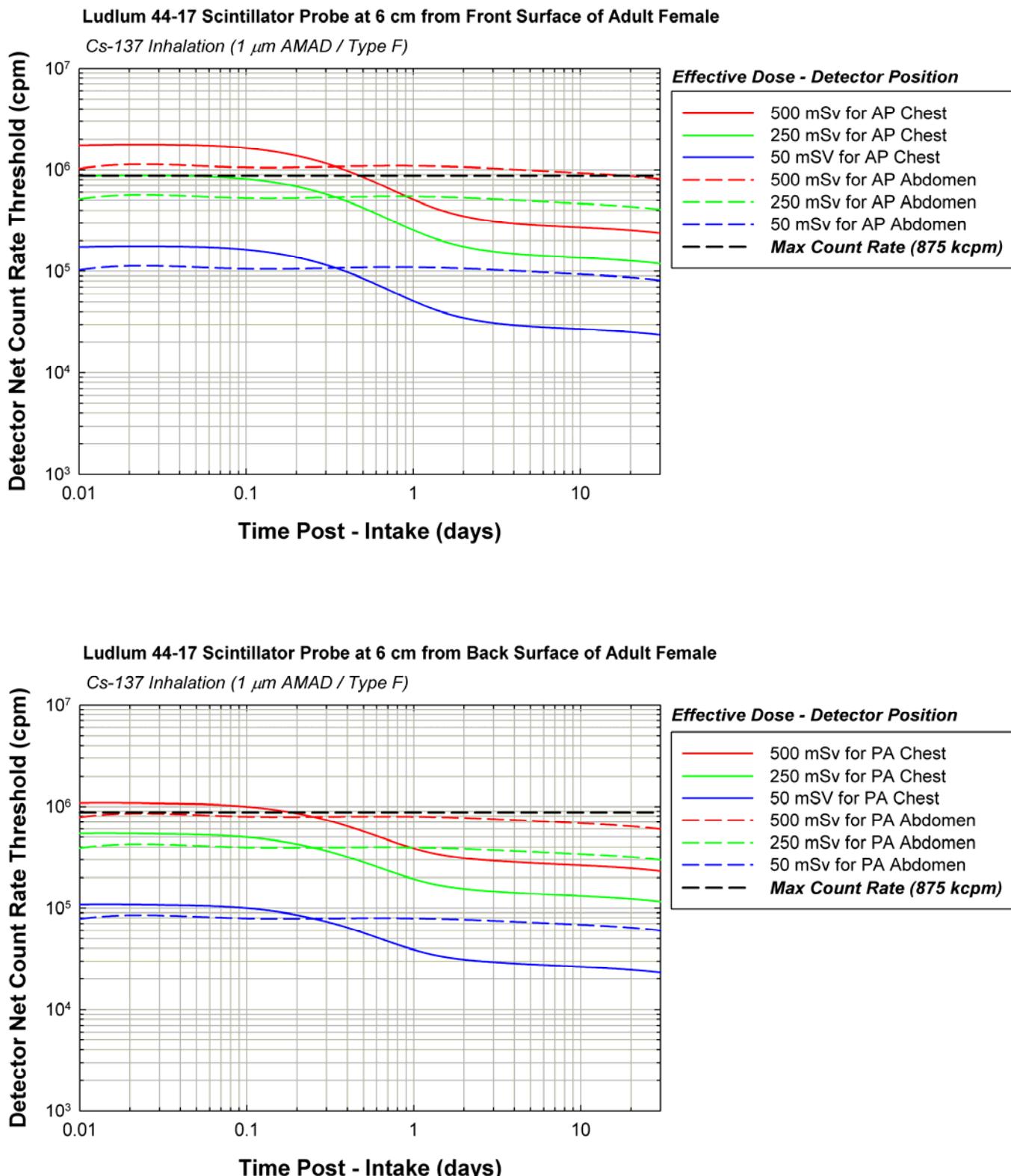
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	5.36E+04	4.15E+04	3.28E+04	3.25E+04	2.68E+05	2.08E+05	1.64E+05	1.63E+05	5.36E+05	4.15E+05	3.28E+05	3.25E+05		
	1	5.24E+04	4.08E+04	3.25E+04	3.21E+04	2.62E+05	2.04E+05	1.63E+05	1.60E+05	5.24E+05	4.08E+05	3.25E+05	3.21E+05		
	2	4.98E+04	3.90E+04	3.14E+04	3.08E+04	2.49E+05	1.95E+05	1.57E+05	1.54E+05	4.98E+05	3.90E+05	3.14E+05	3.08E+05		
	4	4.53E+04	3.69E+04	2.90E+04	2.90E+04	2.26E+05	1.85E+05	1.45E+05	1.45E+05	4.53E+05	3.69E+05	2.90E+05	2.90E+05		
	6	4.15E+04	3.56E+04	2.69E+04	2.76E+04	2.07E+05	1.78E+05	1.34E+05	1.34E+05	4.15E+05	3.56E+05	2.69E+05	2.76E+05		
	8	3.84E+04	3.45E+04	2.52E+04	2.65E+04	1.92E+05	1.73E+05	1.26E+05	1.32E+05	3.84E+05	3.45E+05	2.52E+05	2.65E+05		
	10	3.58E+04	3.36E+04	2.38E+04	2.56E+04	1.79E+05	1.68E+05	1.19E+05	1.28E+05	3.58E+05	3.36E+05	2.38E+05	2.56E+05		
	12	3.36E+04	3.29E+04	2.26E+04	2.49E+04	1.68E+05	1.64E+05	1.13E+05	1.24E+05	3.36E+05	3.29E+05	2.26E+05	2.49E+05		
	14	3.19E+04	3.22E+04	2.17E+04	2.43E+04	1.59E+05	1.61E+05	1.08E+05	1.21E+05	3.19E+05	3.22E+05	2.17E+05	2.43E+05		
	16	3.04E+04	3.17E+04	2.09E+04	2.38E+04	1.52E+05	1.58E+05	1.05E+05	1.19E+05	3.04E+05	3.17E+05	2.09E+05	2.38E+05		
	18	2.91E+04	3.12E+04	2.03E+04	2.34E+04	1.46E+05	1.56E+05	1.01E+05	1.17E+05	2.91E+05	3.12E+05	2.03E+05	2.34E+05		
	20	2.80E+04	3.08E+04	1.97E+04	2.30E+04	1.40E+05	1.54E+05	9.87E+04	1.15E+05	2.80E+05	3.08E+05	1.97E+05	2.30E+05		
1	2.63E+04	3.01E+04	1.89E+04	2.25E+04	1.32E+05	1.51E+05	9.45E+04	1.12E+05	2.63E+05	3.01E+05	1.89E+05	2.25E+05			
2	2.18E+04	2.79E+04	1.68E+04	2.10E+04	1.09E+05	1.40E+05	8.42E+04	1.05E+05	2.18E+05	2.79E+05	1.68E+05	2.10E+05			
3	2.02E+04	2.69E+04	1.61E+04	2.04E+04	1.01E+05	1.34E+05	8.07E+04	1.02E+05	2.02E+05	2.69E+05	1.61E+05	2.04E+05			
4	1.95E+04	2.62E+04	1.57E+04	1.99E+04	9.74E+04	1.31E+05	7.85E+04	9.96E+04	1.95E+05	2.62E+05	1.57E+05	1.99E+05			
5	1.90E+04	2.57E+04	1.54E+04	1.96E+04	9.51E+04	1.28E+05	7.71E+04	9.79E+04	1.90E+05	2.57E+05	1.54E+05	1.96E+05			
6	1.87E+04	2.53E+04	1.52E+04	1.93E+04	9.35E+04	1.26E+05	7.59E+04	9.64E+04	1.87E+05	2.53E+05	1.52E+05	1.93E+05			
7	1.85E+04	2.49E+04	1.50E+04	1.91E+04	9.23E+04	1.25E+05	7.50E+04	9.53E+04	1.85E+05	2.49E+05	1.50E+05	1.91E+05			
8	1.82E+04	2.47E+04	1.49E+04	1.89E+04	9.12E+04	1.23E+05	7.43E+04	9.43E+04	1.82E+05	2.47E+05	1.49E+05	1.89E+05			
9	1.81E+04	2.44E+04	1.47E+04	1.87E+04	9.04E+04	1.22E+05	7.36E+04	9.34E+04	1.81E+05	2.44E+05	1.47E+05	1.87E+05			
10	1.79E+04	2.42E+04	1.46E+04	1.85E+04	8.96E+04	1.21E+05	7.30E+04	9.26E+04	1.79E+05	2.4					

**Table D9 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Cesium-137, Inhalation, 1-μm AMAD Aerosol, Type F, f<sub>A</sub> = 1.00 Ludlum 44-17 Scintillator Probe**

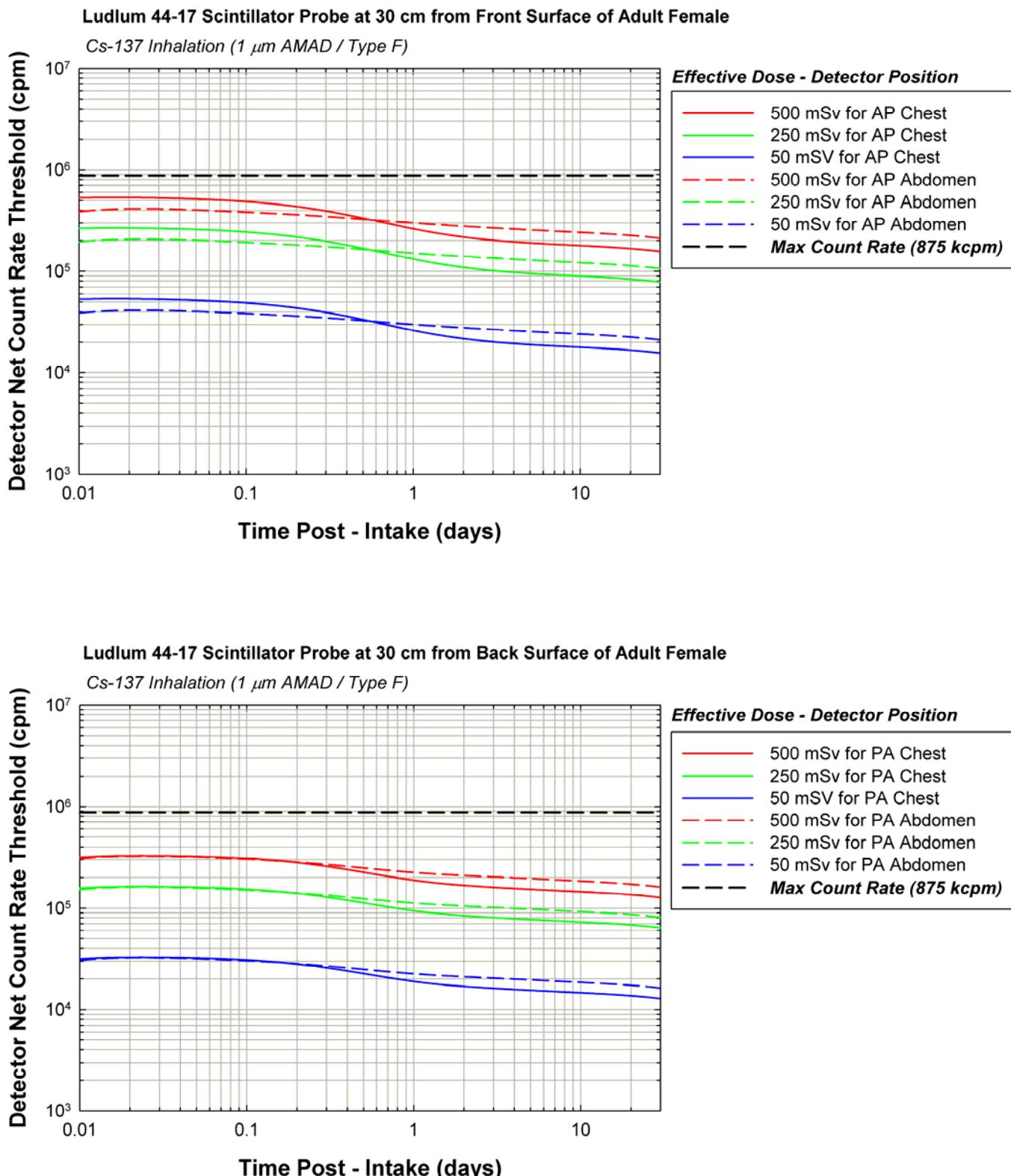
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	8.56E+03	7.74E+03	6.60E+03	6.51E+03	4.28E+04	3.87E+04	3.30E+04	3.25E+04	8.56E+04	7.74E+04	6.60E+04	6.51E+04		
	1	8.43E+03	7.65E+03	6.57E+03	6.39E+03	4.21E+04	3.83E+04	3.28E+04	3.19E+04	8.43E+04	7.65E+04	6.57E+04	6.39E+04		
	2	8.12E+03	7.42E+03	6.33E+03	6.17E+03	4.06E+04	3.71E+04	3.17E+04	3.08E+04	8.12E+04	7.42E+04	6.33E+04	6.17E+04		
	4	7.67E+03	7.12E+03	5.87E+03	5.90E+03	3.84E+04	3.56E+04	2.94E+04	2.95E+04	7.67E+04	7.12E+04	5.87E+04	5.90E+04		
	6	7.32E+03	6.91E+03	5.49E+03	5.72E+03	3.66E+04	3.45E+04	2.74E+04	2.86E+04	7.32E+04	6.91E+04	5.49E+04	5.72E+04		
	8	7.04E+03	6.73E+03	5.18E+03	5.56E+03	3.52E+04	3.36E+04	2.59E+04	2.78E+04	7.04E+04	6.73E+04	5.18E+04	5.56E+04		
	10	6.79E+03	6.57E+03	4.92E+03	5.44E+03	3.40E+04	3.29E+04	2.46E+04	2.72E+04	6.79E+04	6.57E+04	4.92E+04	5.44E+04		
	12	6.58E+03	6.44E+03	4.71E+03	5.33E+03	3.29E+04	3.22E+04	2.35E+04	2.66E+04	6.58E+04	6.44E+04	4.71E+04	5.33E+04		
	14	6.41E+03	6.32E+03	4.54E+03	5.23E+03	3.21E+04	3.16E+04	2.27E+04	2.62E+04	6.41E+04	6.32E+04	4.54E+04	5.23E+04		
	16	6.26E+03	6.22E+03	4.40E+03	5.15E+03	3.13E+04	3.11E+04	2.20E+04	2.58E+04	6.26E+04	6.22E+04	4.40E+04	5.15E+04		
	18	6.13E+03	6.13E+03	4.28E+03	5.08E+03	3.06E+04	3.06E+04	2.14E+04	2.54E+04	6.13E+04	6.13E+04	4.28E+04	5.08E+04		
	20	6.01E+03	6.04E+03	4.18E+03	5.02E+03	3.01E+04	3.02E+04	2.09E+04	2.51E+04	6.01E+04	6.04E+04	4.18E+04	5.02E+04		
1	5.82E+03	5.90E+03	4.02E+03	4.91E+03	2.91E+04	2.95E+04	2.01E+04	2.46E+04	5.82E+04	5.90E+04	4.02E+04	4.91E+04			
2	5.22E+03	5.41E+03	3.63E+03	4.57E+03	2.61E+04	2.70E+04	1.81E+04	2.28E+04	5.22E+04	5.41E+04	3.63E+04	4.57E+04			
3	4.96E+03	5.17E+03	3.48E+03	4.40E+03	2.48E+04	2.59E+04	1.74E+04	2.20E+04	4.96E+04	5.17E+04	3.48E+04	4.40E+04			
4	4.81E+03	5.02E+03	3.39E+03	4.29E+03	2.41E+04	2.51E+04	1.69E+04	2.14E+04	4.81E+04	5.02E+04	3.39E+04	4.29E+04			
5	4.71E+03	4.92E+03	3.33E+03	4.21E+03	2.36E+04	2.46E+04	1.66E+04	2.10E+04	4.71E+04	4.92E+04	3.33E+04	4.21E+04			
6	4.64E+03	4.85E+03	3.28E+03	4.15E+03	2.32E+04	2.42E+04	1.64E+04	2.07E+04	4.64E+04	4.85E+04	3.28E+04	4.15E+04			
7	4.58E+03	4.79E+03	3.24E+03	4.10E+03	2.29E+04	2.39E+04	1.62E+04	2.05E+04	4.58E+04	4.79E+04	3.24E+04	4.10E+04			
8	4.53E+03	4.73E+03	3.20E+03	4.06E+03	2.26E+04	2.37E+04	1.60E+04	2.03E+04	4.53E+04	4.73E+04	3.20E+04	4.06E+04			
9	4.49E+03	4.69E+03	3.17E+03	4.02E+03	2.24E+04	2.34E+04	1.59E+04	2.01E+04	4.49E+04	4.69E+04	3.17E+04	4.02E+04			
10	4.45E+03	4.65E+03	3.15E+03	3.98E+03	2.22E+04	2.32E+04	1.57E+04	1.99E+04	4.45E+04	4.65E+04	3.15E+04	3.98E+04			
15	4.29E+03	4.48E+03	3.04E+03	3.84E+03	2.15E+04	2.24E+04	1.52E+04	1.92E+04	4.29E+04	4.48E+04	3.04E+04	3.84E+04			
20	4.15E+03	4.34E+03	2.94E+03	3.72E+03	2.08E+04	2.17E+04	1.47E+04	1.86E+04	4.15E+04	4.34E+04	2.94E+04	3.72E+04			
25	4.02E+03	4.21E+03	2.85E+03	3.61E+03	2.01E+04	2.10E+04	1.42E+04	1.80E+04	4.02E+04	4.21E+04	2.85E+04	3.61E+04			
30	3.90E+03	4.07E+03	2.76E+03	3.49E+03	1.95E+04	2.04E+04	1.38E+04	1.75E+04	3.90E+04	4.07E+04	2.76E+04	3.49E+04			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	2.60E+03	2.60E+03	1.82E+03	1.82E+03	1.30E+04	1.30E+04	9.08E+03	9.08E+03	2.60E+04	2.60E+04	1.82E+04	1.82E+04		
	1	2.57E+03	2.57E+03	1.82E+03	1.82E+03	1.29E+04	1.29E+04	9.10E+03	9.10E+03	2.57E+04	2.57E+04	1.82E+04	1.82E+04		
	2	2.48E+03	2.48E+03	1.78E+03	1.78E+03	1.24E+04	1.24E+04	8.90E+03	8.90E+03	2.48E+04	2.48E+04	1.78E+04	1.78E+04		
	4	2.36E+03	2.36E+03	1.70E+03	1.70E+03	1.18E+04	1.18E+04	8.48E+03	8.48E+03	2.36E+04	2.36E+04	1.70E+04	1.70E+04		
	6	2.25E+03	2.25E+03	1.62E+03	1.62E+03	1.13E+04	1.13E+04	8.12E+03	8.12E+03	2.25E+04	2.25E+04	1.62E+04	1.62E+04		
	8	2.17E+03	2.17E+03	1.56E+03	1.56E+03	1.09E+04	1.09E+04	7.82E+03	7.82E+03	2.17E+04	2.17E+04	1.56E+04	1.56E+04		
	10	2.10E+03	2.10E+03	1.51E+03	1.51E+03	1.05E+04	1.05E+04	7.57E+03	7.57E+03	2.10E+04	2.10E+04	1.51E+04	1.51E+04		
	12	2.04E+03	2.04E+03	1.47E+03	1.47E+03	1.02E+04	1.02E+04	7.37E+03	7.37E+03	2.04E+04	2.04E+04	1.47E+04	1.47E+04		
	14	1.98E+03	1.98E+03	1.44E+03	1.44E+03	9.92E+03	9.92E+03	7.20E+03	7.20E+03	1.98E+04	1.98E+04	1.44E+04	1.44E+04		
	16	1.94E+03	1.94E+03	1.41E+03	1.41E+03	9.68E+03	9.68E+03	7.06E+03	7.06E+03	1.94E+04	1.94E+04	1.41E+04	1.41E+04		
	18	1.90E+03	1.90E+03	1.39E+03	1.39E+03	9.48E+03	9.48E+03	6.94E+03	6.94E+03	1.90E+04	1.90E+04	1.39E+04	1.39E+04		
	20	1.86E+03	1.86E+03	1.37E+03	1.37E+03	9.29E+03	9.29E+03	6.83E+03	6.83E+03	1.86E+04	1.86E+04	1.37E+04	1.37E+04		
1	1.80E+03	1.80E+03	1.33E+03	1.33E+03	8.99E+03	8.99E+03	6.67E+03	6.67E+03	1.80E+04	1.80E+04	1.33E+04	1.33E+04			
2	1.60E+03	1.60E+03	1.24E+03	1.24E+03	7.99E+03	7.99E+03	6.19E+03	6.19E+03	1.60E+04	1.60E+04	1.24E+04	1.24E+04			
3	1.51E+03	1.51E+03	1.20E+03	1.20E+03	7.56E+03	7.56E+03	5.98E+03	5.98E+03	1.51E+04	1.51E+04	1.20E+04	1.20E+04			
4	1.46E+03	1.46E+03	1.17E+03	1.17E+03	7.32E+03	7.32E+03	5.83E+03	5.83E+03	1.46E+04	1.46E+04	1.17E+04	1.17E+04			
5	1.43E+03	1.43E+03	1.15E+03	1.15E+03	7.17E+03	7.17E+03	5.73E+03	5.73E+03	1.43E+04	1.43E+04	1.15E+04	1.15E+04			
6	1.41E+03	1.41E+03	1.13E+03	1.13E+03	7.05E+03	7.05E+03	5.64E+03	5.64E+03	1.41E+04	1.41E+04	1.13E+04	1.13E+04			
7	1.39E+03	1.39E+03	1.12E+03	1.12E+03	6.96E+03	6.96E+03	5.58E+03	5.58E+03	1.39E+04	1.39E+04	1.12E+04	1.12E+04			
8	1.38E+03	1.38E+03	1.10E+03	1.10E+03	6.89E+03	6.89E+03	5.52E+03	5.52E+03	1.38E+04	1.38E+04	1.10E+04	1.10E+04			
9	1.36E+03	1.36E+03	1.09E+03	1.09E+03	6.82E+03	6.82E+03	5.47E+03	5.47E+03	1.36E+04	1.36E+04	1.09E+04	1.09E+04			
10	1.35E+03	1.35E+03	1.08E+03	1.08E+03	6.76E+03	6.76E+03	5.42E+03	5.42E+03	1.35E+04</td						

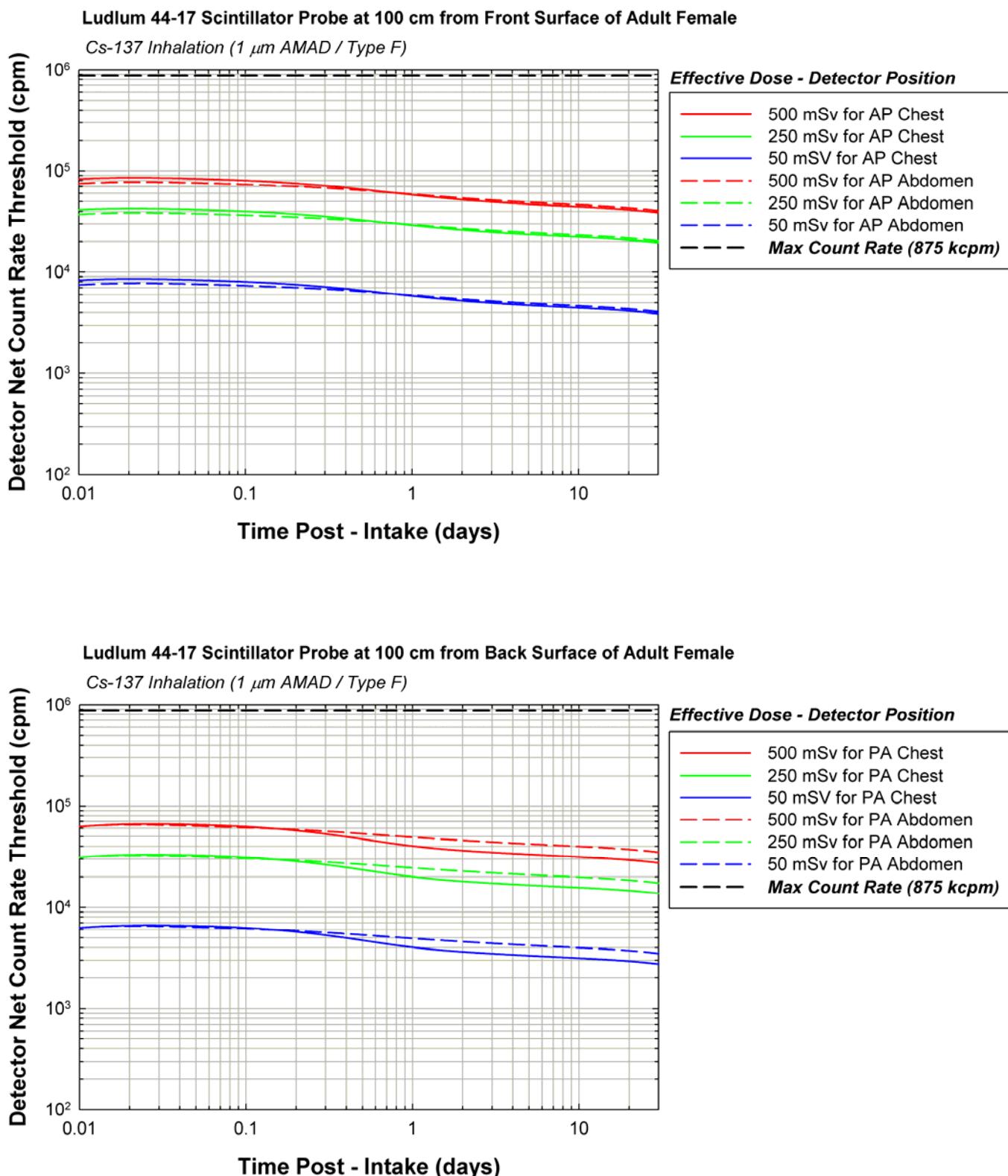
**Table D9** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
**Cesium-137, Inhalation, 1- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  Ludlum 44-17 Scintillator Probe**



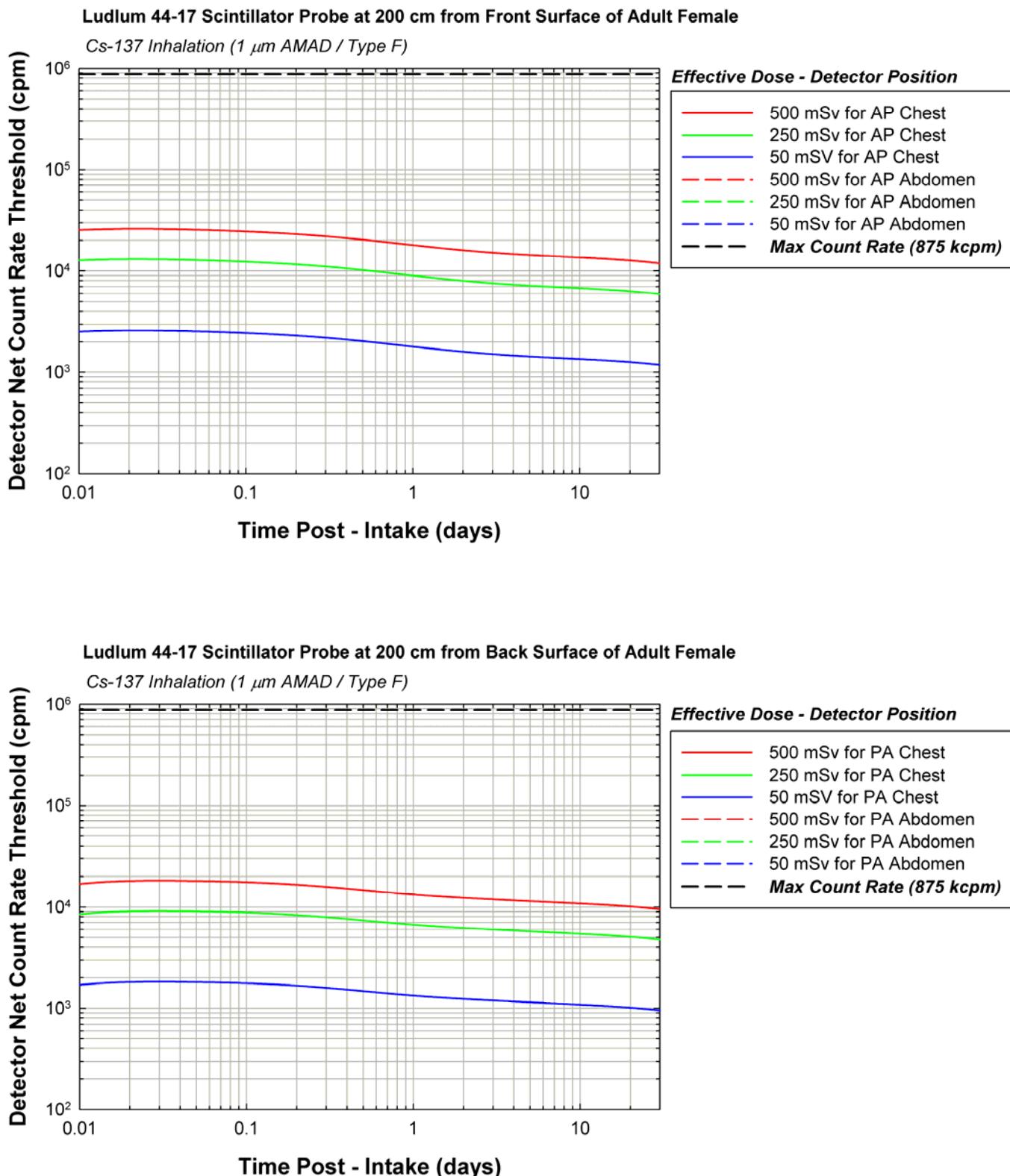
**Table D9** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
**Cesium-137, Inhalation, 1- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  Ludlum 44-17 Scintillator Probe**



**Table D9 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cesium-137, Inhalation, 1- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D9** – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
**Cesium-137, Inhalation, 1- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  Ludlum 44-17 Scintillator Probe**



**Table D10 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Cesium-137, Inhalation, 5-μm AMAD Aerosol, Type F, f<sub>A</sub> = 1.00 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		1.89E+05	1.26E+05	1.10E+05	9.34E+04	9.44E+05	6.32E+05	5.52E+05	4.67E+05	1.89E+06	1.26E+06	1.10E+06	9.34E+05		
1		1.91E+05	1.21E+05	1.12E+05	8.95E+04	9.55E+05	6.04E+05	5.58E+05	4.47E+05	1.91E+06	1.21E+06	1.12E+06	8.95E+05		
2		1.85E+05	1.13E+05	1.09E+05	8.40E+04	9.26E+05	5.66E+05	5.43E+05	4.20E+05	1.85E+06	1.13E+06	1.09E+06	8.40E+05		
4		1.63E+05	1.11E+05	9.67E+04	8.17E+04	8.15E+05	5.53E+05	4.84E+05	4.08E+05	1.63E+06	1.11E+06	9.67E+05	8.17E+05		
6		1.41E+05	1.11E+05	8.51E+04	8.17E+04	7.07E+05	5.57E+05	4.25E+05	4.09E+05	1.41E+06	1.11E+06	8.51E+05	8.17E+05		
8		1.24E+05	1.12E+05	7.54E+04	8.20E+04	6.18E+05	5.62E+05	3.77E+05	4.10E+05	1.24E+06	1.12E+06	7.54E+05	8.20E+05		
10		1.09E+05	1.13E+05	6.76E+04	8.22E+04	5.44E+05	5.65E+05	3.38E+05	4.11E+05	1.09E+06	1.13E+06	6.76E+05	8.22E+05		
12		9.68E+04	1.13E+05	6.12E+04	8.23E+04	4.84E+05	5.67E+05	3.06E+05	4.11E+05	9.68E+05	1.13E+06	6.12E+05	8.23E+05		
14		8.71E+04	1.14E+05	5.62E+04	8.23E+04	4.35E+05	5.68E+05	2.81E+05	4.11E+05	8.71E+05	1.14E+06	5.62E+05	8.23E+05		
16		7.90E+04	1.14E+05	5.20E+04	8.22E+04	3.95E+05	5.69E+05	2.60E+05	4.11E+05	7.90E+05	1.14E+06	5.20E+05	8.22E+05		
18		7.23E+04	1.14E+05	4.86E+04	8.21E+04	3.61E+05	5.69E+05	2.43E+05	4.11E+05	7.23E+05	1.14E+06	4.86E+05	8.21E+05		
20		6.67E+04	1.14E+05	4.58E+04	8.20E+04	3.33E+05	5.68E+05	2.29E+05	4.10E+05	6.67E+05	1.14E+06	4.58E+05	8.20E+05		
1		5.79E+04	1.13E+05	4.15E+04	8.16E+04	2.90E+05	5.66E+05	2.07E+05	4.08E+05	5.79E+05	1.13E+06	4.15E+05	8.16E+05		
2		3.80E+04	1.09E+05	3.25E+04	7.91E+04	1.90E+05	5.47E+05	1.63E+05	3.96E+05	3.80E+05	1.09E+06	3.25E+05	7.91E+05		
3		3.28E+04	1.06E+05	3.03E+04	7.70E+04	1.64E+05	5.30E+05	1.52E+05	3.85E+05	3.28E+05	1.06E+06	3.03E+05	7.70E+05		
4		3.07E+04	1.04E+05	2.93E+04	7.54E+04	1.54E+05	5.18E+05	1.47E+05	3.77E+05	3.07E+05	1.04E+06	2.93E+05	7.54E+05		
5		2.97E+04	1.02E+05	2.87E+04	7.41E+04	1.49E+05	5.08E+05	1.44E+05	3.70E+05	2.97E+05	1.02E+06	2.87E+05	7.41E+05		
6		2.91E+04	9.99E+04	2.83E+04	7.30E+04	1.46E+05	5.00E+05	1.41E+05	3.65E+05	2.91E+05	9.99E+05	2.83E+05	7.30E+05		
7		2.87E+04	9.86E+04	2.79E+04	7.22E+04	1.43E+05	4.93E+05	1.40E+05	3.61E+05	2.87E+05	9.86E+05	2.79E+05	7.22E+05		
8		2.84E+04	9.75E+04	2.76E+04	7.14E+04	1.42E+05	4.88E+05	1.38E+05	3.57E+05	2.84E+05	9.75E+05	2.76E+05	7.14E+05		
9		2.81E+04	9.66E+04	2.74E+04	7.07E+04	1.41E+05	4.83E+05	1.37E+05	3.54E+05	2.81E+05	9.66E+05	2.74E+05	7.07E+05		
10		2.79E+04	9.57E+04	2.71E+04	7.02E+04	1.39E+05	4.79E+05	1.36E+05	3.51E+05	2.79E+05	9.57E+05	2.71E+05	7.02E+05		
15		2.69E+04	9.25E+04	2.62E+04	6.78E+04	1.35E+05	4.63E+05	1.31E+05	3.39E+05	2.69E+05	9.25E+05	2.62E+05	6.78E+05		
20		2.60E+04	8.93E+04	2.54E+04	6.55E+04	1.30E+05	4.46E+05	1.27E+05	3.28E+05	2.60E+05	8.93E+05	2.54E+05	6.55E+05		
25		2.52E+04	8.65E+04	2.46E+04	6.35E+04	1.26E+05	4.33E+05	1.23E+05	3.17E+05	2.52E+05	8.65E+05	2.46E+05	6.35E+05		
30		2.44E+04	8.38E+04	2.38E+04	6.15E+04	1.22E+05	4.19E+05	1.19E+05	3.07E+05	2.44E+05	8.38E+05	2.38E+05	6.15E+05		

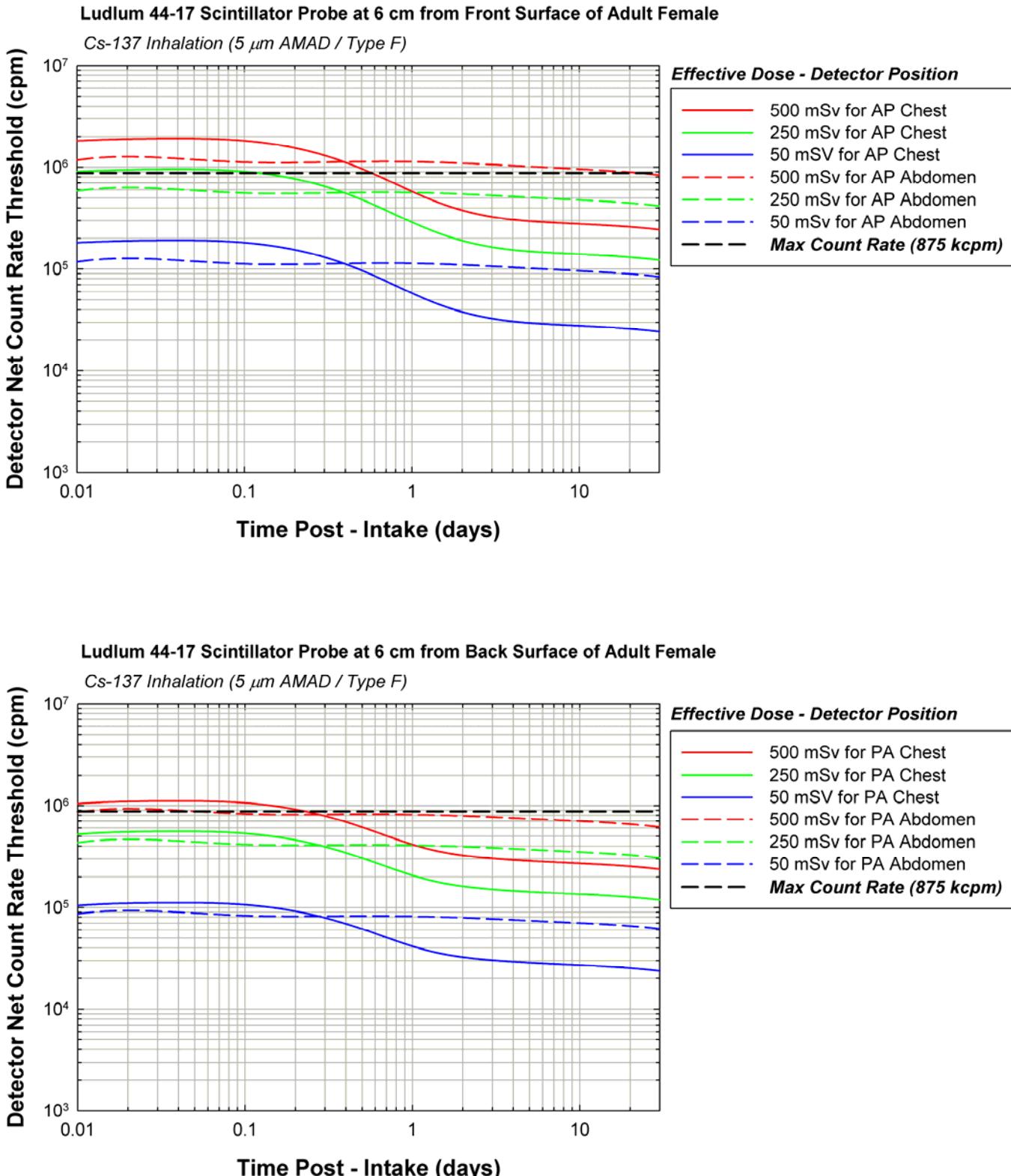
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		6.07E+04	4.63E+04	3.48E+04	3.46E+04	3.03E+05	2.32E+05	1.74E+05	1.73E+05	6.07E+05	4.63E+05	3.48E+05	3.46E+05		
1		5.95E+04	4.50E+04	3.48E+04	3.40E+04	2.97E+05	2.25E+05	1.74E+05	1.70E+05	5.95E+05	4.50E+05	3.48E+05	3.40E+05		
2		5.67E+04	4.25E+04	3.38E+04	3.25E+04	2.83E+05	2.12E+05	1.69E+05	1.62E+05	5.67E+05	4.25E+05	3.38E+05	3.25E+05		
4		5.16E+04	4.00E+04	3.12E+04	3.04E+04	2.58E+05	2.00E+05	1.56E+05	1.52E+05	5.16E+05	4.00E+05	3.12E+05	3.04E+05		
6		4.72E+04	3.84E+04	2.89E+04	2.89E+04	2.36E+05	1.92E+05	1.45E+05	1.45E+05	4.72E+05	3.84E+05	2.89E+05	2.89E+05		
8		4.36E+04	3.71E+04	2.71E+04	2.78E+04	2.18E+05	1.86E+05	1.35E+05	1.39E+05	4.36E+05	3.71E+05	2.71E+05	2.78E+05		
10		4.06E+04	3.60E+04	2.55E+04	2.68E+04	2.03E+05	1.80E+05	1.28E+05	1.34E+05	4.06E+05	3.60E+05	2.55E+05	2.68E+05		
12		3.81E+04	3.51E+04	2.42E+04	2.60E+04	1.90E+05	1.76E+05	1.21E+05	1.30E+05	3.81E+05	3.51E+05	2.42E+05	2.60E+05		
14		3.60E+04	3.44E+04	2.32E+04	2.53E+04	1.80E+05	1.72E+05	1.16E+05	1.27E+05	3.60E+05	3.44E+05	2.32E+05	2.53E+05		
16		3.42E+04	3.37E+04	2.23E+04	2.48E+04	1.71E+05	1.68E+05	1.12E+05	1.24E+05	3.42E+05	3.37E+05	2.23E+05	2.48E+05		
18		3.26E+04	3.31E+04	2.16E+04	2.43E+04	1.63E+05	1.66E+05	1.08E+05	1.22E+05	3.26E+05	3.31E+05	2.16E+05	2.43E+05		
20		3.13E+04	3.26E+04	2.10E+04	2.40E+04	1.57E+05	1.63E+05	1.05E+05	1.20E+05	3.13E+05	3.26E+05	2.10E+05	2.40E+05		
1		2.91E+04	3.17E+04	2.00E+04	2.33E+04	1.46E+05	1.59E+05	9.99E+04	1.17E+05	2.91E+05	3.17E+05	2.00E+05	2.33E+05		
2		2.31E+04	2.90E+04	1.75E+04	2.17E+04	1.16E+05	1.45E+05	8.75E+04	1.08E+05	2.31E+05	2.90E+05	1.75E+05	2.17E+05		
3		2.11E+04	2.77E+04	1.66E+04	2.09E+04	1.05E+05	1.38E+05	8.31E+04	1.05E+05	2.11E+05	2.77E+05	1.66E+05	2.09E+05		
4		2.01E+04	2.69E+04	1.61E+04	2.05E+04	1.00E+05	1.35E+05	8.07E+04	1.02E+05	2.01E+05	2.69E+05	1.61E+05	2.05E+05		
5		1.96E+04	2.64E+04	1.58E+04	2.01E+04	9.78E+04	1.32E+05	7.91E+04	1.00E+05	1.96E+05	2.64E+05	1.58E+05	2.01E+05		
6		1.92E+04	2.59E+04	1.56E+04	1.98E+04	9.60E+04	1.30E+05	7.80E+04	9.90E+04	1.92E+05	2.59E+05	1.56E+05	1.98E+05		
7		1.89E+04	2.56E+04	1.54E+04	1.96E+04	9.47E+04	1.28E+05	7.70E+04	9.78E+04	1.89E+05	2.56E+05	1.54E+05	1.96E+05		
8		1.87E+04	2.53E+04	1.52E+04	1.94E+04	9.37E+04	1.27E+05	7.62E+04	9.68E+04	1.87E+05	2.53E+05	1.52E+05	1.94E+05		
9		1.86E+04	2.51E+04	1.51E+04	1.92E+04	9.28E+04	1.25E+05	7.55E+04	9.59E+04	1.86E+05	2.51E+05	1.51E+05	1.92E+05		
10		1.84E+04	2.49E+04</td												

**Table D10 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Cesium-137, Inhalation, 5-μm AMAD Aerosol, Type F, f<sub>A</sub> = 1.00 Ludlum 44-17 Scintillator Probe**

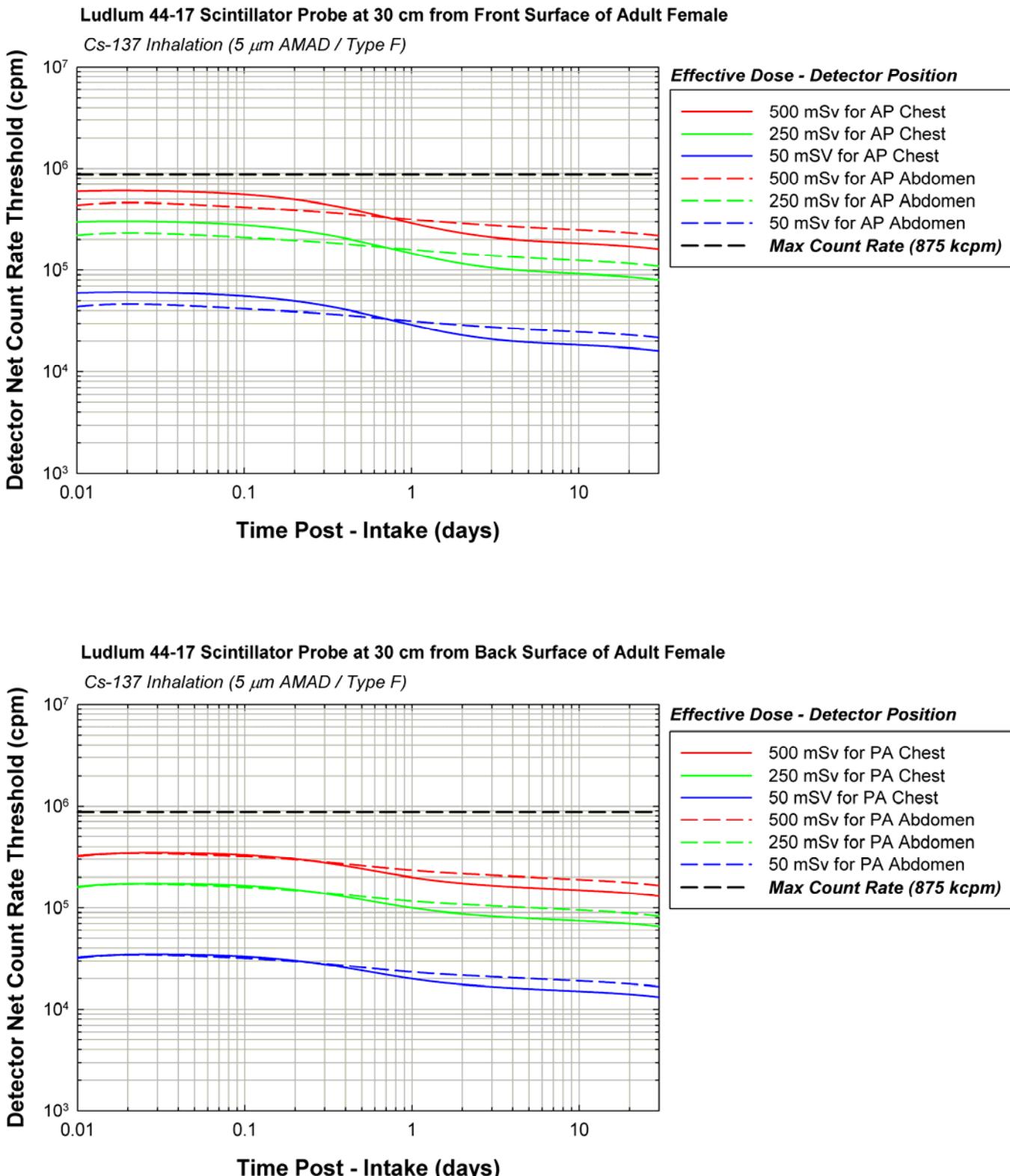
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		9.67E+03	8.74E+03	7.08E+03	7.11E+03	4.84E+04	4.37E+04	3.54E+04	3.56E+04	9.67E+04	8.74E+04	7.08E+04	7.11E+04		
1		9.48E+03	8.57E+03	7.05E+03	6.97E+03	4.74E+04	4.29E+04	3.53E+04	3.48E+04	9.48E+04	8.57E+04	7.05E+04	6.97E+04		
2		9.10E+03	8.26E+03	6.81E+03	6.69E+03	4.55E+04	4.13E+04	3.40E+04	3.34E+04	9.10E+04	8.26E+04	6.81E+04	6.69E+04		
4		8.56E+03	7.88E+03	6.32E+03	6.37E+03	4.28E+04	3.94E+04	3.16E+04	3.18E+04	8.56E+04	7.88E+04	6.32E+04	6.37E+04		
6		8.14E+03	7.61E+03	5.90E+03	6.15E+03	4.07E+04	3.80E+04	2.95E+04	3.07E+04	8.14E+04	7.61E+04	5.90E+04	6.15E+04		
8		7.79E+03	7.38E+03	5.55E+03	5.97E+03	3.90E+04	3.69E+04	2.78E+04	2.98E+04	7.79E+04	7.38E+04	5.55E+04	5.97E+04		
10		7.50E+03	7.18E+03	5.27E+03	5.81E+03	3.75E+04	3.59E+04	2.63E+04	2.91E+04	7.50E+04	7.18E+04	5.27E+04	5.81E+04		
12		7.24E+03	7.01E+03	5.03E+03	5.68E+03	3.62E+04	3.50E+04	2.52E+04	2.84E+04	7.24E+04	7.01E+04	5.03E+04	5.68E+04		
14		7.02E+03	6.85E+03	4.84E+03	5.57E+03	3.51E+04	3.43E+04	2.42E+04	2.78E+04	7.02E+04	6.85E+04	4.84E+04	5.57E+04		
16		6.83E+03	6.72E+03	4.68E+03	5.47E+03	3.41E+04	3.36E+04	2.34E+04	2.73E+04	6.83E+04	6.72E+04	4.68E+04	5.47E+04		
18		6.66E+03	6.59E+03	4.54E+03	5.38E+03	3.33E+04	3.30E+04	2.27E+04	2.69E+04	6.66E+04	6.59E+04	4.54E+04	5.38E+04		
20		6.51E+03	6.48E+03	4.43E+03	5.30E+03	3.25E+04	3.24E+04	2.21E+04	2.65E+04	6.51E+04	6.48E+04	4.43E+04	5.30E+04		
1		6.26E+03	6.29E+03	4.24E+03	5.17E+03	3.13E+04	3.15E+04	2.12E+04	2.58E+04	6.26E+04	6.29E+04	4.24E+04	5.17E+04		
2		5.46E+03	5.64E+03	3.76E+03	4.73E+03	2.73E+04	2.82E+04	1.88E+04	2.37E+04	5.46E+04	5.64E+04	3.76E+04	4.73E+04		
3		5.13E+03	5.34E+03	3.58E+03	4.53E+03	2.56E+04	2.67E+04	1.79E+04	2.26E+04	5.13E+04	5.34E+04	3.58E+04	4.53E+04		
4		4.95E+03	5.17E+03	3.48E+03	4.41E+03	2.48E+04	2.58E+04	1.74E+04	2.20E+04	4.95E+04	5.17E+04	3.48E+04	4.41E+04		
5		4.84E+03	5.06E+03	3.41E+03	4.32E+03	2.42E+04	2.53E+04	1.71E+04	2.16E+04	4.84E+04	5.06E+04	3.41E+04	4.32E+04		
6		4.76E+03	4.98E+03	3.36E+03	4.26E+03	2.38E+04	2.49E+04	1.68E+04	2.13E+04	4.76E+04	4.98E+04	3.36E+04	4.26E+04		
7		4.70E+03	4.91E+03	3.32E+03	4.21E+03	2.35E+04	2.46E+04	1.66E+04	2.10E+04	4.70E+04	4.91E+04	3.32E+04	4.21E+04		
8		4.65E+03	4.86E+03	3.29E+03	4.16E+03	2.32E+04	2.43E+04	1.64E+04	2.08E+04	4.65E+04	4.86E+04	3.29E+04	4.16E+04		
9		4.61E+03	4.81E+03	3.26E+03	4.13E+03	2.30E+04	2.41E+04	1.63E+04	2.06E+04	4.61E+04	4.81E+04	3.26E+04	4.13E+04		
10		4.57E+03	4.77E+03	3.23E+03	4.09E+03	2.28E+04	2.39E+04	1.61E+04	2.05E+04	4.57E+04	4.77E+04	3.23E+04	4.09E+04		
15		4.40E+03	4.60E+03	3.12E+03	3.95E+03	2.20E+04	2.30E+04	1.56E+04	1.97E+04	4.40E+04	4.60E+04	3.12E+04	3.95E+04		
20		4.26E+03	4.45E+03	3.02E+03	3.82E+03	2.13E+04	2.23E+04	1.51E+04	1.91E+04	4.26E+04	4.45E+04	3.02E+04	3.82E+04		
25		4.13E+03	4.32E+03	2.92E+03	3.70E+03	2.07E+04	2.16E+04	1.46E+04	1.85E+04	4.13E+04	4.32E+04	2.92E+04	3.70E+04		
30		4.00E+03	4.18E+03	2.83E+03	3.58E+03	2.00E+04	2.09E+04	1.41E+04	1.79E+04	4.00E+04	4.18E+04	2.83E+04	3.58E+04		

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		2.99E+03	2.99E+03	1.92E+03	1.92E+03	1.50E+04	1.50E+04	9.62E+03	9.62E+03	2.99E+04	2.99E+04	1.92E+04	1.92E+04		
1		2.94E+03	2.94E+03	1.94E+03	1.94E+03	1.47E+04	1.47E+04	9.68E+03	9.68E+03	2.94E+04	2.94E+04	1.94E+04	1.94E+04		
2		2.82E+03	2.82E+03	1.90E+03	1.90E+03	1.41E+04	1.41E+04	9.48E+03	9.48E+03	2.82E+04	2.82E+04	1.90E+04	1.90E+04		
4		2.66E+03	2.66E+03	1.81E+03	1.81E+03	1.33E+04	1.33E+04	9.03E+03	9.03E+03	2.66E+04	2.66E+04	1.81E+04	1.81E+04		
6		2.54E+03	2.54E+03	1.73E+03	1.73E+03	1.27E+04	1.27E+04	8.63E+03	8.63E+03	2.54E+04	2.54E+04	1.73E+04	1.73E+04		
8		2.43E+03	2.43E+03	1.66E+03	1.66E+03	1.22E+04	1.22E+04	8.30E+03	8.30E+03	2.43E+04	2.43E+04	1.66E+04	1.66E+04		
10		2.34E+03	2.34E+03	1.60E+03	1.60E+03	1.17E+04	1.17E+04	8.02E+03	8.02E+03	2.34E+04	2.34E+04	1.60E+04	1.60E+04		
12		2.26E+03	2.26E+03	1.56E+03	1.56E+03	1.13E+04	1.13E+04	7.78E+03	7.78E+03	2.26E+04	2.26E+04	1.56E+04	1.56E+04		
14		2.20E+03	2.20E+03	1.52E+03	1.52E+03	1.10E+04	1.10E+04	7.59E+03	7.59E+03	2.20E+04	2.20E+04	1.52E+04	1.52E+04		
16		2.13E+03	2.13E+03	1.49E+03	1.49E+03	1.07E+04	1.07E+04	7.43E+03	7.43E+03	2.13E+04	2.13E+04	1.49E+04	1.49E+04		
18		2.08E+03	2.08E+03	1.46E+03	1.46E+03	1.04E+04	1.04E+04	7.29E+03	7.29E+03	2.08E+04	2.08E+04	1.46E+04	1.46E+04		
20		2.03E+03	2.03E+03	1.43E+03	1.43E+03	1.02E+04	1.02E+04	7.17E+03	7.17E+03	2.03E+04	2.03E+04	1.43E+04	1.43E+04		
1		1.95E+03	1.95E+03	1.39E+03	1.39E+03	9.74E+03	9.74E+03	6.97E+03	6.97E+03	1.95E+04	1.95E+04	1.39E+04	1.39E+04		
2		1.68E+03	1.68E+03	1.28E+03	1.28E+03	8.39E+03	8.39E+03	6.40E+03	6.40E+03	1.68E+04	1.68E+04	1.28E+04	1.28E+04		
3		1.57E+03	1.57E+03	1.23E+03	1.23E+03	7.83E+03	7.83E+03	6.15E+03	6.15E+03	1.57E+04	1.57E+04	1.23E+04	1.23E+04		
4		1.51E+03	1.51E+03	1.20E+03	1.20E+03	7.54E+03	7.54E+03	5.99E+03	5.99E+03	1.51E+04	1.51E+04	1.20E+04	1.20E+04		
5		1.47E+03	1.47E+03	1.18E+03	1.18E+03	7.36E+03	7.36E+03	5.88E+03	5.88E+03	1.47E+04	1.47E+04	1.18E+04	1.18E+04		
6		1.45E+03	1.45E+03	1.16E+03	1.16E+03	7.24E+03	7.24E+03	5.79E+03	5.79E+03	1.45E+04	1.45E+04	1.16E+04	1.16E+04		
7		1.43E+03	1.43E+03	1.14E+03	1.14E+03	7.15E+03	7.15E+03	5.72E+03	5.72E+03	1.43E+04	1.43E+04	1.14E+04	1.14E+04		
8		1.41E+03	1.41E+03	1.13E+03	1.13E+03	7.07E+03	7.07E+03	5.66E+03	5.66E+03	1.41E+04	1.41E+04	1.13E+04	1.13E+04		
9		1.40E+03	1.40E+03	1.12E+03	1.12E+03	7.00E+03	7.00E+03	5.61E+03	5.61E+03	1.40E+04	1.40E+04	1.12E+04	1.12E+04		
10		1.39E+03	1.39												

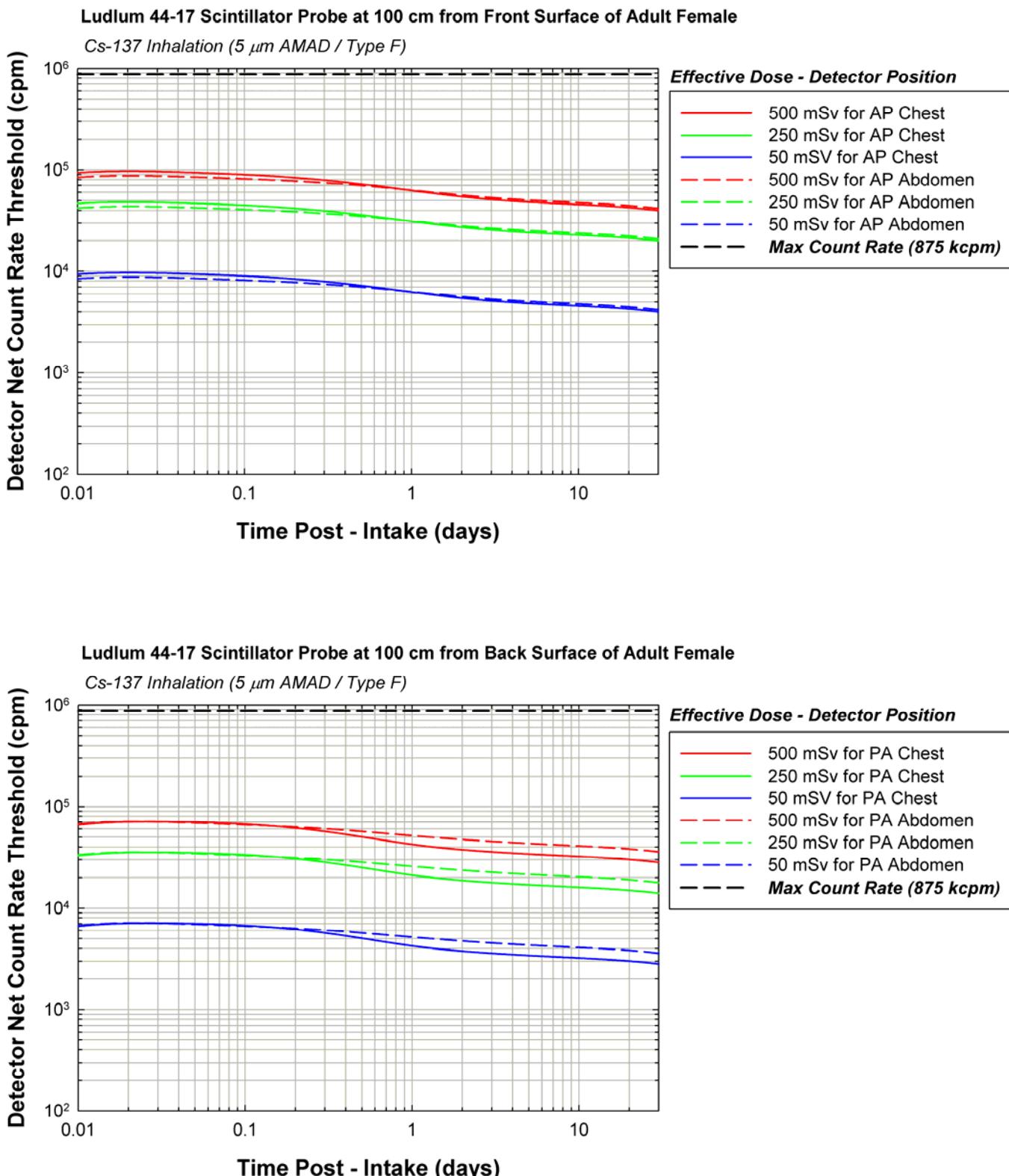
**Table D10 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cesium-137, Inhalation, 5- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



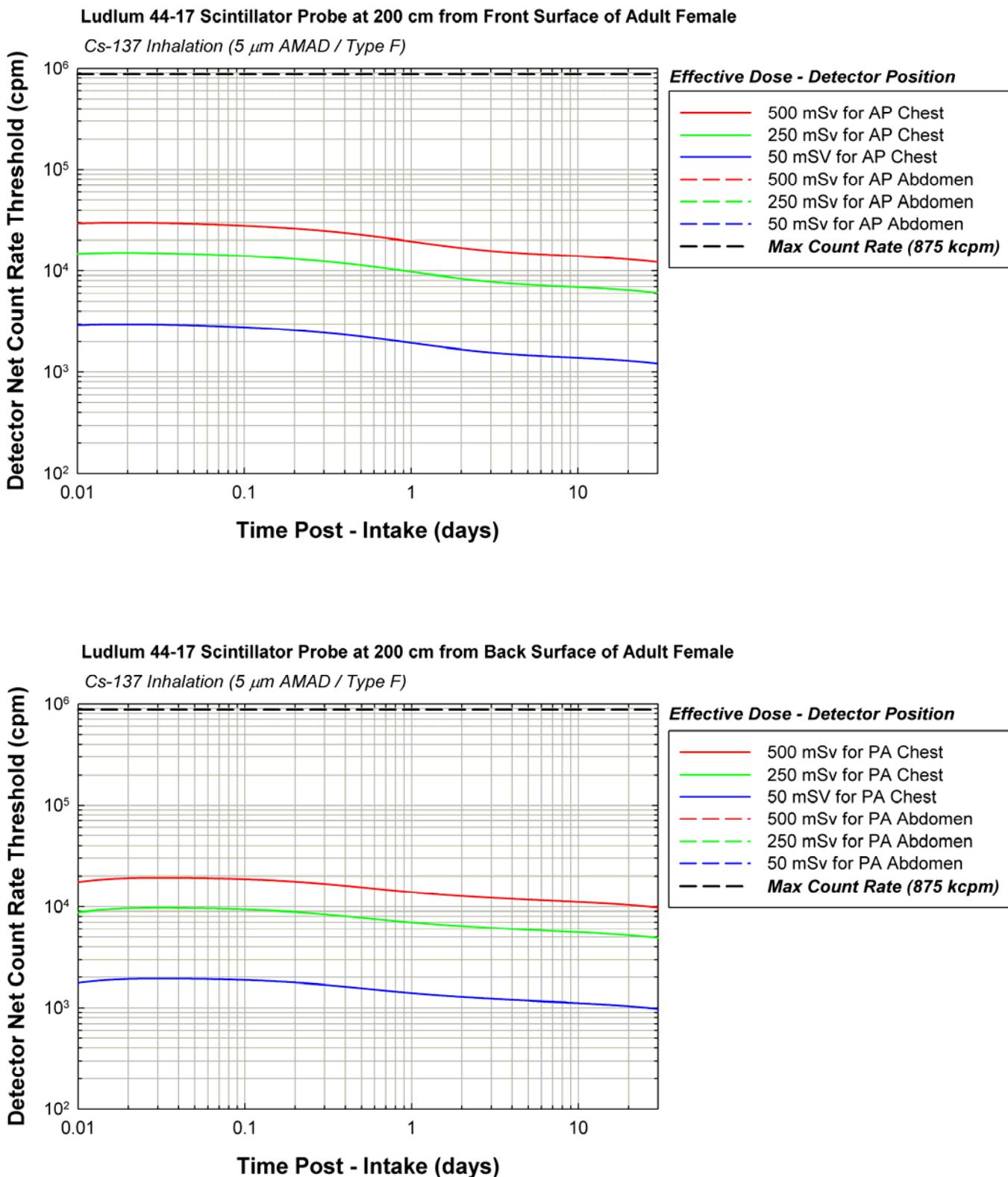
**Table D10 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cesium-137, Inhalation, 5- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D10 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cesium-137, Inhalation, 5- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D10 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cesium-137, Inhalation, 5- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D11 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Cesium-137, Ingestion,  $f_A = 1.00$  Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	1.28E+05	1.60E+05	8.75E+04	1.19E+05	6.38E+05	7.98E+05	4.38E+05	5.95E+05	1.28E+06	1.60E+06	8.75E+05	1.19E+06		
	1	1.44E+05	1.39E+05	9.71E+04	1.05E+05	7.19E+05	6.94E+05	4.86E+05	5.24E+05	1.44E+06	1.39E+06	9.71E+05	1.05E+06		
	2	1.52E+05	1.19E+05	1.02E+05	9.12E+04	7.60E+05	5.97E+05	5.11E+05	4.56E+05	1.52E+06	1.19E+06	1.02E+06	9.12E+05		
	4	1.37E+05	1.12E+05	9.36E+04	8.51E+04	6.86E+05	5.58E+05	4.68E+05	4.25E+05	1.37E+06	1.12E+06	9.36E+05	8.51E+05		
	6	1.17E+05	1.12E+05	8.20E+04	4.89E+04	5.87E+05	5.62E+05	4.10E+05	4.24E+05	1.17E+06	1.12E+06	8.20E+05	4.89E+05		
	8	1.01E+05	1.14E+05	7.22E+04	8.53E+04	5.03E+05	5.69E+05	3.61E+05	4.26E+05	1.01E+06	1.14E+06	7.22E+05	8.53E+05		
	10	8.70E+04	1.15E+05	6.42E+04	8.56E+04	4.35E+05	5.76E+05	3.21E+05	4.28E+05	8.70E+05	1.15E+06	6.42E+05	8.56E+05		
	12	7.61E+04	1.16E+05	5.79E+04	8.59E+04	3.81E+05	5.80E+05	2.89E+05	4.29E+05	7.61E+05	1.16E+06	5.79E+05	8.59E+05		
	14	6.77E+04	1.17E+05	5.29E+04	8.60E+04	3.38E+05	5.84E+05	2.65E+05	4.30E+05	6.77E+05	1.17E+06	4.89E+05	8.60E+05		
	16	6.09E+04	1.17E+05	4.89E+04	8.61E+04	3.04E+05	5.86E+05	2.45E+05	4.30E+05	6.09E+05	1.17E+06	4.57E+05	8.61E+05		
	18	5.54E+04	1.18E+05	4.57E+04	8.61E+04	2.77E+05	5.88E+05	2.28E+05	4.30E+05	5.54E+05	1.18E+06	4.57E+05	8.61E+05		
	20	5.10E+04	1.18E+05	4.31E+04	8.60E+04	2.55E+05	5.88E+05	2.15E+05	4.30E+05	5.10E+05	1.18E+06	4.31E+05	8.60E+05		
1	4.46E+04	1.18E+05	3.93E+04	8.58E+04	2.23E+05	5.89E+05	1.96E+05	4.29E+05	4.46E+05	1.18E+06	3.93E+05	8.58E+05			
2	3.39E+04	1.15E+05	3.26E+04	8.37E+04	1.69E+05	5.76E+05	1.63E+05	4.18E+05	3.39E+05	1.15E+06	3.26E+05	8.37E+05			
3	3.24E+04	1.12E+05	3.15E+04	8.16E+04	1.62E+05	5.61E+05	1.57E+05	4.08E+05	3.24E+05	1.12E+06	3.15E+05	8.16E+05			
4	3.17E+04	1.10E+05	3.08E+04	7.99E+04	1.59E+05	5.48E+05	1.54E+05	3.99E+05	3.17E+05	1.10E+06	3.08E+05	7.99E+05			
5	3.12E+04	1.08E+05	3.03E+04	7.85E+04	1.56E+05	5.38E+05	1.52E+05	3.93E+05	3.12E+05	1.08E+06	3.03E+05	7.85E+05			
6	3.07E+04	1.06E+05	2.99E+04	7.74E+04	1.54E+05	5.29E+05	1.50E+05	3.87E+05	3.07E+05	1.06E+06	2.99E+05	7.74E+05			
7	3.04E+04	1.05E+05	2.96E+04	7.65E+04	1.52E+05	5.23E+05	1.48E+05	3.82E+05	3.04E+05	1.05E+06	2.96E+05	7.65E+05			
8	3.01E+04	1.03E+05	2.93E+04	7.57E+04	1.50E+05	5.17E+05	1.46E+05	3.78E+05	3.01E+05	1.03E+06	2.93E+05	7.57E+05			
9	2.98E+04	1.02E+05	2.90E+04	7.50E+04	1.49E+05	5.12E+05	1.45E+05	3.75E+05	2.98E+05	1.02E+06	2.90E+05	7.50E+05			
10	2.95E+04	1.01E+05	2.88E+04	7.43E+04	1.48E+05	5.07E+05	1.44E+05	3.72E+05	2.95E+05	1.01E+06	2.88E+05	7.43E+05			
15	2.86E+04	9.80E+04	2.78E+04	7.19E+04	1.43E+05	4.90E+05	1.39E+05	3.59E+05	2.86E+05	9.80E+05	2.78E+05	7.19E+05			
20	2.76E+04	9.46E+04	2.69E+04	6.94E+04	1.38E+05	4.73E+05	1.34E+05	3.47E+05	2.76E+05	9.46E+05	2.69E+05	6.94E+05			
25	2.67E+04	9.17E+04	2.60E+04	6.73E+04	1.34E+05	4.58E+05	1.30E+05	3.36E+05	2.67E+05	9.17E+05	2.60E+05	6.73E+05			
30	2.59E+04	8.88E+04	2.52E+04	6.51E+04	1.29E+05	4.44E+05	1.26E+05	3.26E+05	2.59E+05	8.88E+05	2.52E+05	6.51E+05			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	4.73E+04	4.88E+04	3.10E+04	3.73E+04	2.36E+05	2.44E+05	1.55E+05	1.87E+05	4.73E+05	4.88E+05	3.10E+05	3.73E+05		
	1	4.65E+04	4.47E+04	3.16E+04	3.56E+04	2.32E+05	2.24E+05	1.58E+05	1.78E+05	4.65E+05	4.47E+05	3.16E+05	3.56E+05		
	2	4.44E+04	4.04E+04	3.15E+04	3.34E+04	2.22E+05	2.02E+05	1.57E+05	1.67E+05	4.44E+05	4.04E+05	3.15E+05	3.34E+05		
	4	4.02E+04	3.72E+04	2.94E+04	3.10E+04	2.01E+05	1.86E+05	1.47E+05	1.55E+05	4.02E+05	3.72E+05	2.94E+05	3.10E+05		
	6	3.67E+04	3.57E+04	2.73E+04	2.94E+04	1.84E+05	1.79E+05	1.36E+05	1.47E+05	3.67E+05	3.57E+05	2.73E+05	2.94E+05		
	8	3.39E+04	3.48E+04	2.55E+04	2.82E+04	1.69E+05	1.74E+05	1.28E+05	1.41E+05	3.39E+05	3.48E+05	2.55E+05	2.82E+05		
	10	3.16E+04	3.40E+04	2.41E+04	2.73E+04	1.58E+05	1.70E+05	1.20E+05	1.36E+05	3.16E+05	3.40E+05	2.41E+05	2.73E+05		
	12	2.98E+04	3.34E+04	2.29E+04	2.65E+04	1.49E+05	1.67E+05	1.15E+05	1.33E+05	2.98E+05	3.34E+05	2.29E+05	2.65E+05		
	14	2.84E+04	3.29E+04	2.20E+04	2.59E+04	1.42E+05	1.64E+05	1.10E+05	1.29E+05	2.84E+05	3.29E+05	2.20E+05	2.59E+05		
	16	2.72E+04	3.24E+04	2.13E+04	2.54E+04	1.36E+05	1.62E+05	1.06E+05	1.27E+05	2.72E+05	3.24E+05	2.13E+05	2.54E+05		
	18	2.63E+04	3.21E+04	2.07E+04	2.50E+04	1.31E+05	1.60E+05	1.03E+05	1.25E+05	2.63E+05	3.21E+05	2.07E+05	2.50E+05		
	20	2.55E+04	3.18E+04	2.02E+04	2.46E+04	1.27E+05	1.59E+05	1.01E+05	1.23E+05	2.55E+05	3.18E+05	2.02E+05	2.46E+05		
1	2.44E+04	3.13E+04	1.94E+04	2.41E+04	1.22E+05	1.56E+05	9.72E+04	1.20E+05	2.44E+05	3.13E+05	1.94E+05	2.41E+05			
2	2.21E+04	2.99E+04	1.79E+04	2.27E+04	1.10E+05	1.49E+05	8.94E+04	1.14E+05	2.21E+05	2.99E+05	1.79E+05	2.27E+05			
3	2.14E+04	2.90E+04	1.74E+04	2.21E+04	1.07E+05	1.45E+05	8.69E+04	1.11E+05	2.14E+05	2.90E+05	1.74E+05	2.21E+05			
4	2.10E+04	2.84E+04	1.70E+04	2.16E+04	1.05E+05	1.42E+05	8.51E+04	1.08E+05	2.10E+05	2.84E+05	1.70E+05	2.16E+05			
5	2.06E+04	2.79E+04	1.67E+04	2.13E+04	1.03E+05	1.39E+05	8.37E+04	1.06E+05	2.06E+05	2.79E+05	1.67E+05	2.13E+05			
6	2.03E+04	2.75E+04	1.65E+04	2.10E+04	1.02E+05	1.37E+05	8.26E+04	1.05E+05	2.03E+05	2.75E+05	1.65E+05	2.10E+05			
7	2.01E+04	2.71E+04	1.63E+04	2.07E+04	1.00E+05	1.36E+05	8.16E+04	1.04E+05	2.01E+05	2.71E+05	1.63E+05	2.07E+05			
8	1.98E+04	2.68E+04	1.62E+04	2.05E+04	9.92E+04	1.34E+05	8.08E+04	1.03E+05	1.98E+05	2.68E+05	1.62E+05	2.05E+05			
9	1.97E+04	2.66E+04	1.60E+04	2.03E+04	9.83E+04	1.33E+05	8.00E+04	1.02E+05	1.97E+05	2.66E+05	1.60E+05	2.03E+05			
10	1.95E+04	2.63E+04	1.59E+04	2.01E+04	9.75E+04	1.32E+05	7.94E+04	1.01E+05	1.95E+05	2.63E+05	1				

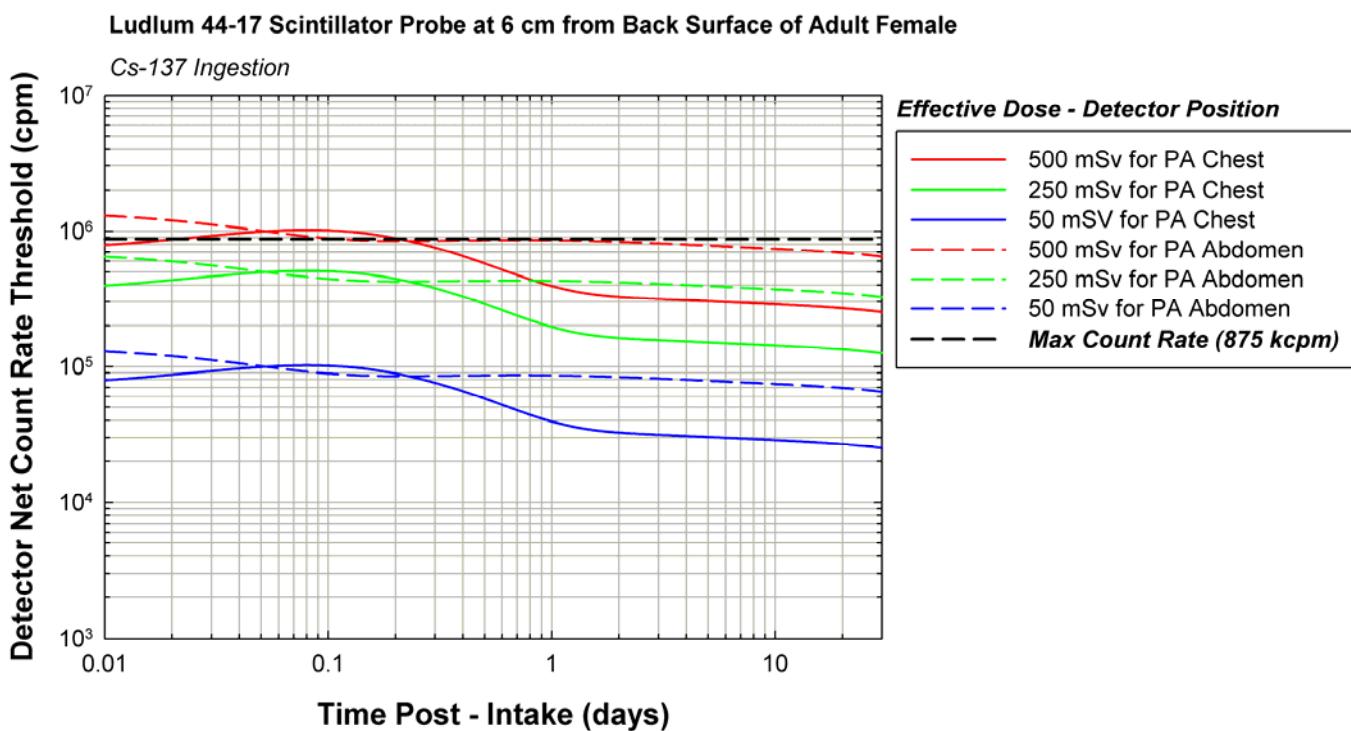
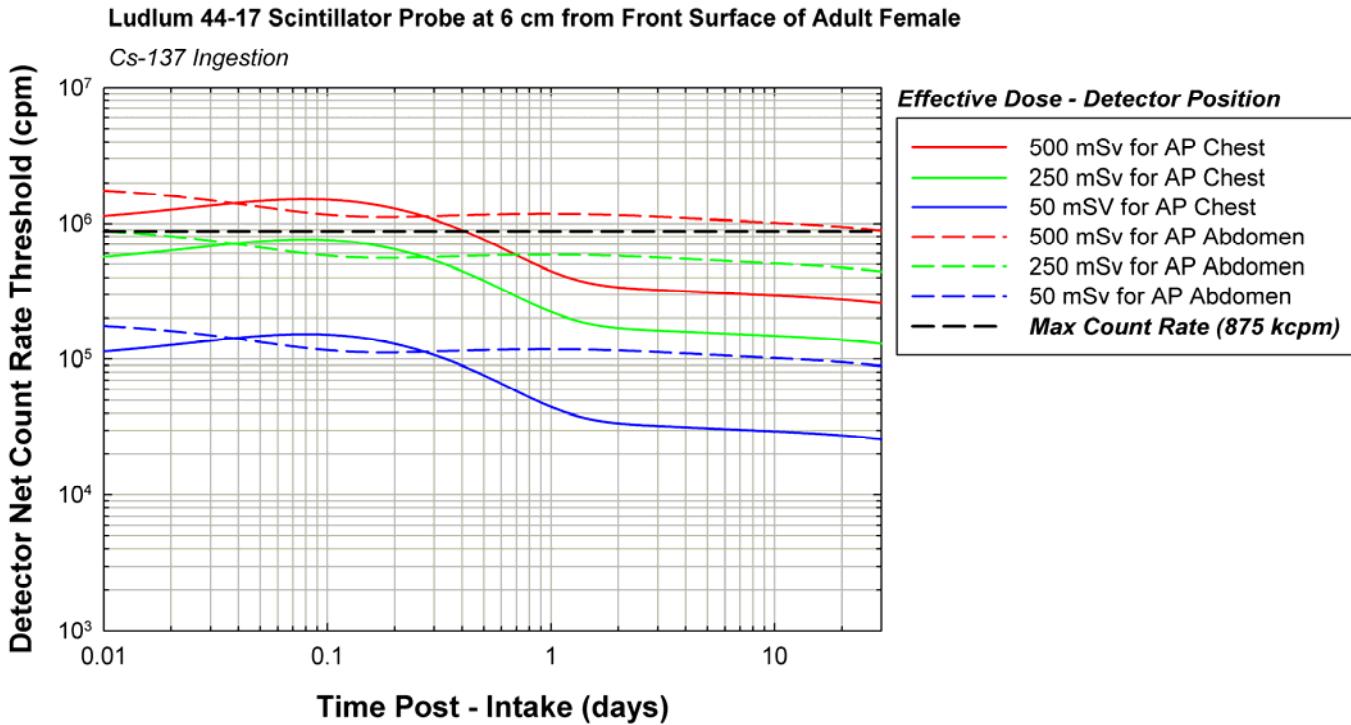
**Table D11 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Cesium-137, Ingestion,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	8.43E+03	7.94E+03	6.62E+03	7.08E+03	4.22E+04	3.97E+04	3.31E+04	3.54E+04	8.43E+04	7.94E+04	6.62E+04	7.08E+04		
	1	8.05E+03	7.52E+03	6.59E+03	6.69E+03	4.03E+04	3.76E+04	3.30E+04	3.34E+04	8.05E+04	7.52E+04	6.59E+04	6.69E+04		
	2	7.59E+03	7.06E+03	6.42E+03	6.25E+03	3.79E+04	3.53E+04	3.21E+04	3.13E+04	7.59E+04	7.06E+04	6.42E+04	6.25E+04		
	4	7.10E+03	6.70E+03	5.98E+03	5.89E+03	3.55E+04	3.35E+04	2.99E+04	2.95E+04	7.10E+04	6.70E+04	5.98E+04	5.89E+04		
	6	6.80E+03	6.53E+03	5.59E+03	5.71E+03	3.40E+04	3.27E+04	2.79E+04	2.86E+04	6.80E+04	6.53E+04	5.59E+04	5.71E+04		
	8	6.57E+03	6.41E+03	5.27E+03	5.58E+03	3.29E+04	3.21E+04	2.63E+04	2.79E+04	6.57E+04	6.41E+04	5.27E+04	5.58E+04		
	10	6.39E+03	6.32E+03	5.01E+03	5.48E+03	3.19E+04	3.16E+04	2.50E+04	2.74E+04	6.39E+04	6.32E+04	5.01E+04	5.48E+04		
	12	6.24E+03	6.23E+03	4.80E+03	5.39E+03	3.12E+04	3.12E+04	2.40E+04	2.69E+04	6.24E+04	6.23E+04	4.80E+04	5.39E+04		
	14	6.12E+03	6.17E+03	4.63E+03	5.32E+03	3.06E+04	3.08E+04	2.32E+04	2.66E+04	6.12E+04	6.17E+04	4.63E+04	5.32E+04		
	16	6.02E+03	6.11E+03	4.50E+03	5.26E+03	3.01E+04	3.06E+04	2.25E+04	2.63E+04	6.02E+04	6.11E+04	4.50E+04	5.26E+04		
	18	5.94E+03	6.06E+03	4.39E+03	5.21E+03	2.97E+04	3.03E+04	2.19E+04	2.60E+04	5.94E+04	6.06E+04	4.39E+04	5.21E+04		
	20	5.87E+03	6.02E+03	4.30E+03	5.16E+03	2.93E+04	3.01E+04	2.15E+04	2.58E+04	5.87E+04	6.02E+04	4.30E+04	5.16E+04		
1	5.76E+03	5.95E+03	4.16E+03	5.09E+03	2.88E+04	2.97E+04	2.08E+04	2.55E+04	5.76E+04	5.95E+04	4.16E+04	5.09E+04			
2	5.46E+03	5.71E+03	3.86E+03	4.87E+03	2.73E+04	2.86E+04	1.93E+04	2.44E+04	5.46E+04	5.71E+04	3.86E+04	4.87E+04			
3	5.32E+03	5.56E+03	3.75E+03	4.75E+03	2.66E+04	2.78E+04	1.88E+04	2.37E+04	5.32E+04	5.56E+04	3.75E+04	4.75E+04			
4	5.20E+03	5.44E+03	3.67E+03	4.65E+03	2.60E+04	2.72E+04	1.84E+04	2.33E+04	5.20E+04	5.44E+04	3.67E+04	4.65E+04			
5	5.11E+03	5.35E+03	3.61E+03	4.57E+03	2.56E+04	2.67E+04	1.81E+04	2.29E+04	5.11E+04	5.35E+04	3.61E+04	4.57E+04			
6	5.04E+03	5.27E+03	3.56E+03	4.51E+03	2.52E+04	2.63E+04	1.78E+04	2.26E+04	5.04E+04	5.27E+04	3.56E+04	4.51E+04			
7	4.98E+03	5.20E+03	3.52E+03	4.46E+03	2.49E+04	2.60E+04	1.76E+04	2.23E+04	4.98E+04	5.20E+04	3.52E+04	4.46E+04			
8	4.93E+03	5.15E+03	3.48E+03	4.41E+03	2.46E+04	2.57E+04	1.74E+04	2.21E+04	4.93E+04	5.15E+04	3.48E+04	4.41E+04			
9	4.88E+03	5.10E+03	3.45E+03	4.37E+03	2.44E+04	2.55E+04	1.73E+04	2.19E+04	4.88E+04	5.10E+04	3.45E+04	4.37E+04			
10	4.84E+03	5.06E+03	3.42E+03	4.33E+03	2.42E+04	2.53E+04	1.71E+04	2.17E+04	4.84E+04	5.06E+04	3.42E+04	4.33E+04			
15	4.67E+03	4.88E+03	3.30E+03	4.18E+03	2.33E+04	2.44E+04	1.65E+04	2.09E+04	4.67E+04	4.88E+04	3.30E+04	4.18E+04			
20	4.52E+03	4.72E+03	3.20E+03	4.05E+03	2.26E+04	2.36E+04	1.60E+04	2.02E+04	4.52E+04	4.72E+04	3.20E+04	4.05E+04			
25	4.38E+03	4.57E+03	3.10E+03	3.92E+03	2.19E+04	2.29E+04	1.55E+04	1.96E+04	4.38E+04	4.57E+04	3.10E+04	3.92E+04			
30	4.24E+03	4.43E+03	3.00E+03	3.80E+03	2.12E+04	2.21E+04	1.50E+04	1.90E+04	4.24E+04	4.43E+04	3.00E+04	3.80E+04			

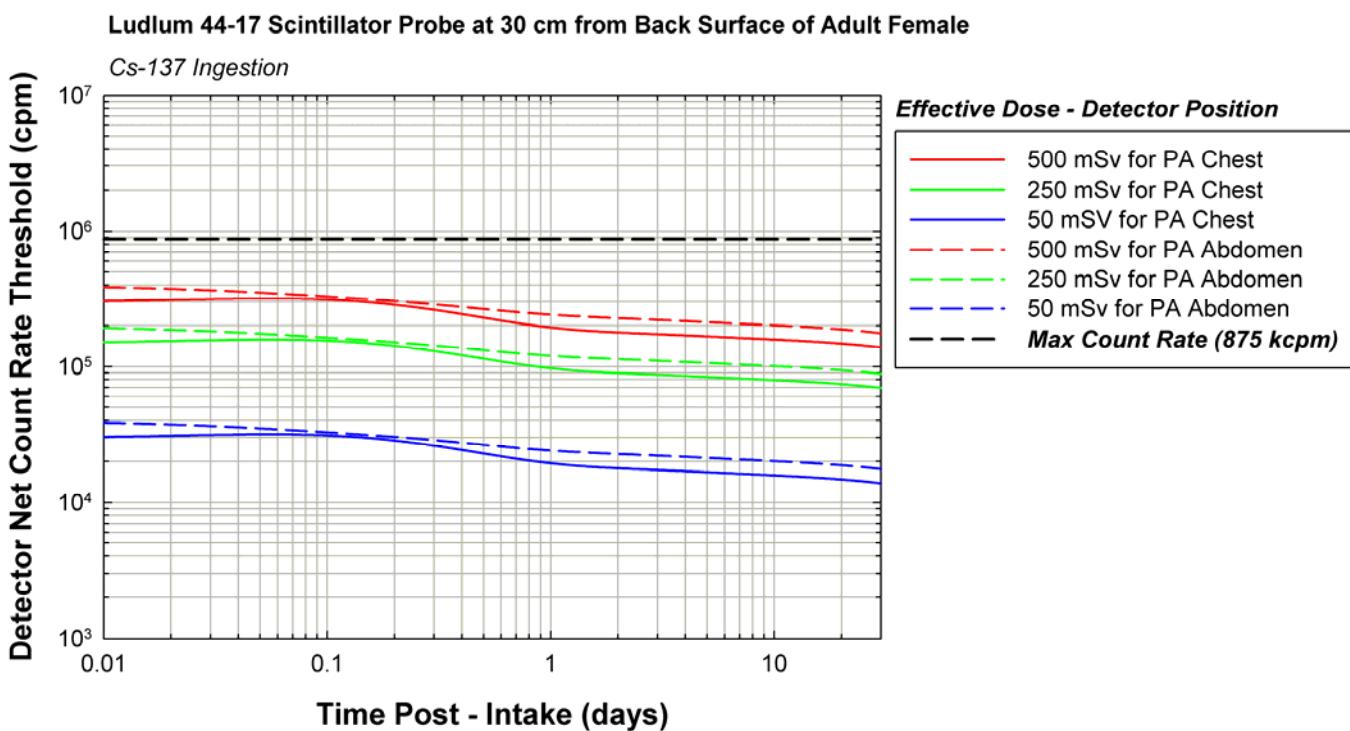
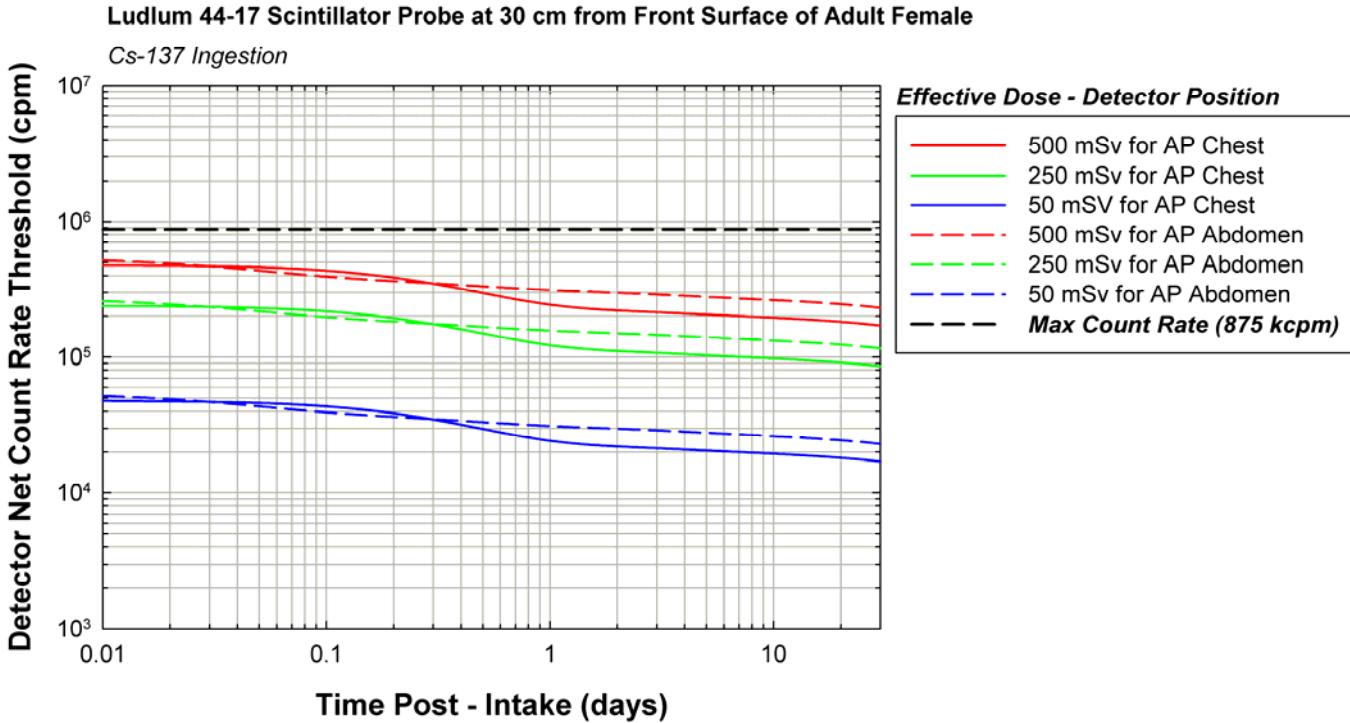
  

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	2.47E+03	2.47E+03	1.82E+03	1.82E+03	1.24E+04	1.24E+04	9.12E+03	9.12E+03	2.47E+04	2.47E+04	1.82E+04	1.82E+04		
	1	2.36E+03	2.36E+03	1.84E+03	1.84E+03	1.18E+04	1.18E+04	9.18E+03	9.18E+03	2.36E+04	2.36E+04	1.84E+04	1.84E+04		
	2	2.23E+03	2.23E+03	1.82E+03	1.82E+03	1.11E+04	1.11E+04	9.11E+03	9.11E+03	2.23E+04	2.23E+04	1.82E+04	1.82E+04		
	4	2.10E+03	2.10E+03	1.75E+03	1.75E+03	1.05E+04	1.05E+04	8.75E+03	8.75E+03	2.10E+04	2.10E+04	1.75E+04	1.75E+04		
	6	2.02E+03	2.02E+03	1.68E+03	1.68E+03	1.01E+04	1.01E+04	8.39E+03	8.39E+03	2.02E+04	2.02E+04	1.68E+04	1.68E+04		
	8	1.96E+03	1.96E+03	1.62E+03	1.62E+03	9.79E+03	9.79E+03	8.09E+03	8.09E+03	1.96E+04	1.96E+04	1.62E+04	1.62E+04		
	10	1.91E+03	1.91E+03	1.57E+03	1.57E+03	9.55E+03	9.55E+03	7.84E+03	7.84E+03	1.91E+04	1.91E+04	1.57E+04	1.57E+04		
	12	1.87E+03	1.87E+03	1.53E+03	1.53E+03	9.36E+03	9.36E+03	7.64E+03	7.64E+03	1.87E+04	1.87E+04	1.53E+04	1.53E+04		
	14	1.84E+03	1.84E+03	1.50E+03	1.50E+03	9.20E+03	9.20E+03	7.48E+03	7.48E+03	1.84E+04	1.84E+04	1.50E+04	1.50E+04		
	16	1.81E+03	1.81E+03	1.47E+03	1.47E+03	9.07E+03	9.07E+03	7.35E+03	7.35E+03	1.81E+04	1.81E+04	1.47E+04	1.47E+04		
	18	1.79E+03	1.79E+03	1.45E+03	1.45E+03	8.96E+03	8.96E+03	7.24E+03	7.24E+03	1.79E+04	1.79E+04	1.45E+04	1.45E+04		
	20	1.77E+03	1.77E+03	1.43E+03	1.43E+03	8.87E+03	8.87E+03	7.15E+03	7.15E+03	1.77E+04	1.77E+04	1.43E+04	1.43E+04		
1	1.74E+03	1.74E+03	1.40E+03	1.40E+03	8.72E+03	8.72E+03	7.01E+03	7.01E+03	1.74E+04	1.74E+04	1.40E+04	1.40E+04			
2	1.66E+03	1.66E+03	1.33E+03	1.33E+03	8.30E+03	8.30E+03	6.64E+03	6.64E+03	1.66E+04	1.66E+04	1.33E+04	1.33E+04			
3	1.62E+03	1.62E+03	1.29E+03	1.29E+03	8.08E+03	8.08E+03	6.46E+03	6.46E+03	1.62E+04	1.62E+04	1.29E+04	1.29E+04			
4	1.58E+03	1.58E+03	1.27E+03	1.27E+03	7.91E+03	7.91E+03	6.33E+03	6.33E+03	1.58E+04	1.58E+04	1.27E+04	1.27E+04			
5	1.55E+03	1.55E+03	1.24E+03	1.24E+03	7.77E+03	7.77E+03	6.22E+03	6.22E+03	1.55E+04	1.55E+04	1.24E+04	1.24E+04			
6	1.53E+03	1.53E+03	1.23E+03	1.23E+03	7.66E+03	7.66E+03	6.14E+03	6.14E+03	1.53E+04	1.53E+04	1.23E+04	1.23E+04			
7	1.51E+03	1.51E+03	1.21E+03	1.21E+03	7.57E+03	7.57E+03	6.06E+03	6.06E+03	1.51E+04	1.51E+04	1.21E+04	1.21E+04			
8	1.50E+03	1.50E+03	1.20E+03	1.20E+03	7.49E+03	7.49E+03	6.00E+03	6.00E+03	1.50E+04	1.50E+04	1.20E+04	1.20E+04			
9	1.48E+03	1.48E+03	1.19E+03	1.19E+03	7.42E+03	7.42E+03	5.95E+03	5.95E+03	1.48E+04	1.48E+04	1.19E+04	1.19E+04			
10	1.47E+03	1.47E+03	1.18E+03	1.18E+03	7.36E+03	7.36E+03	5.90E+03	5.90E+03	1.47E+04	1.47E+04	1.18E+04	1.1			

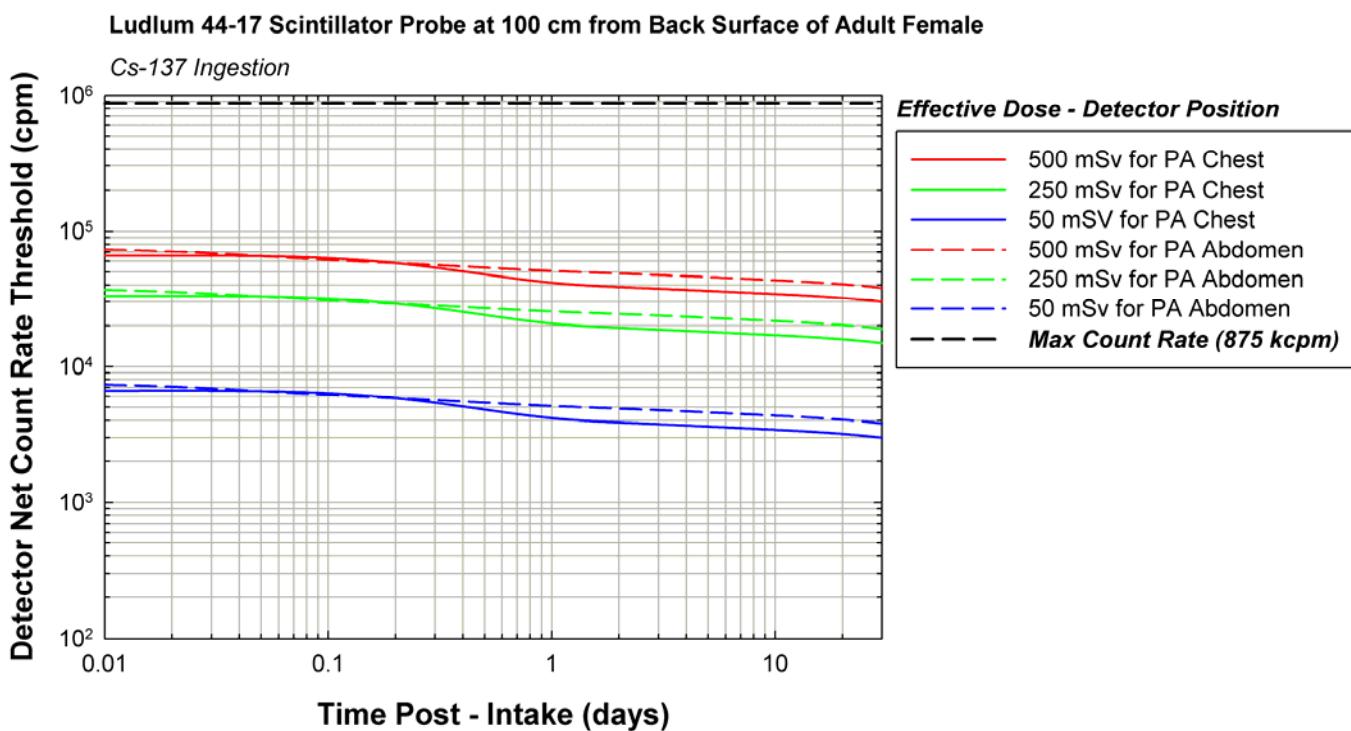
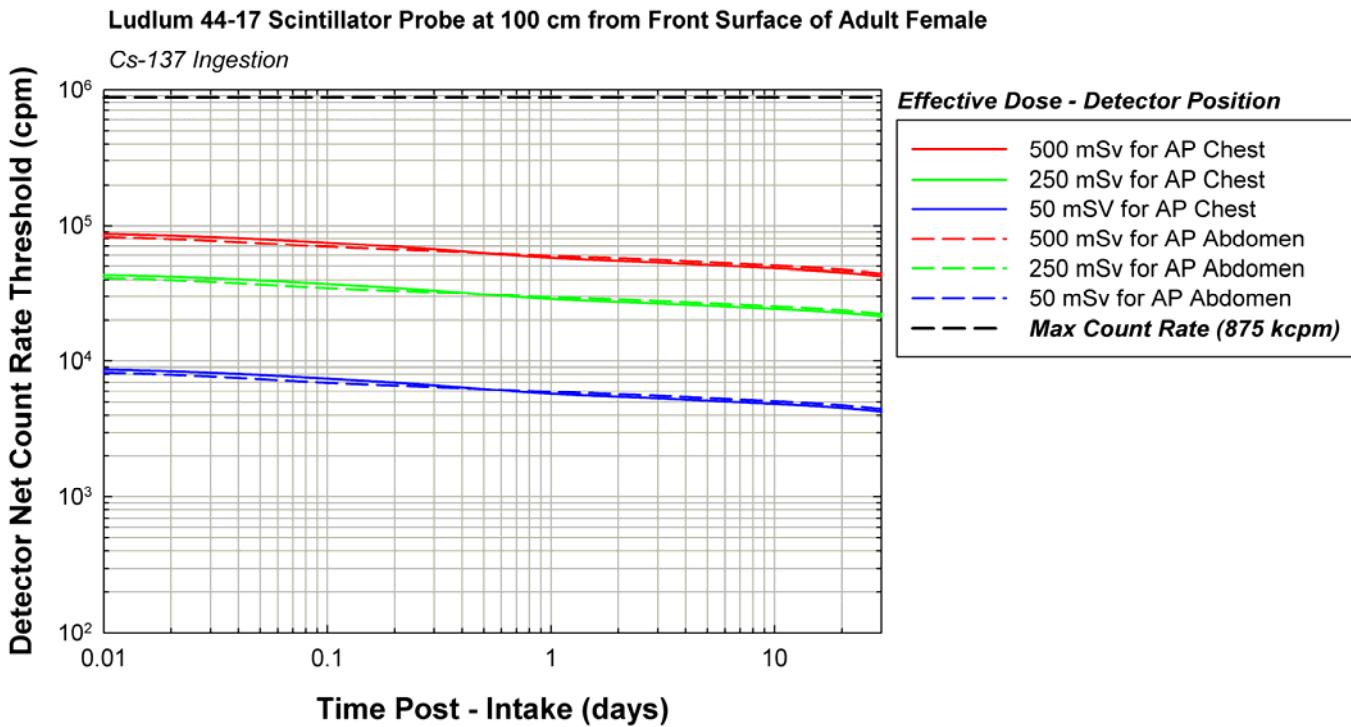
**Table D11 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cesium-137, Ingestion,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



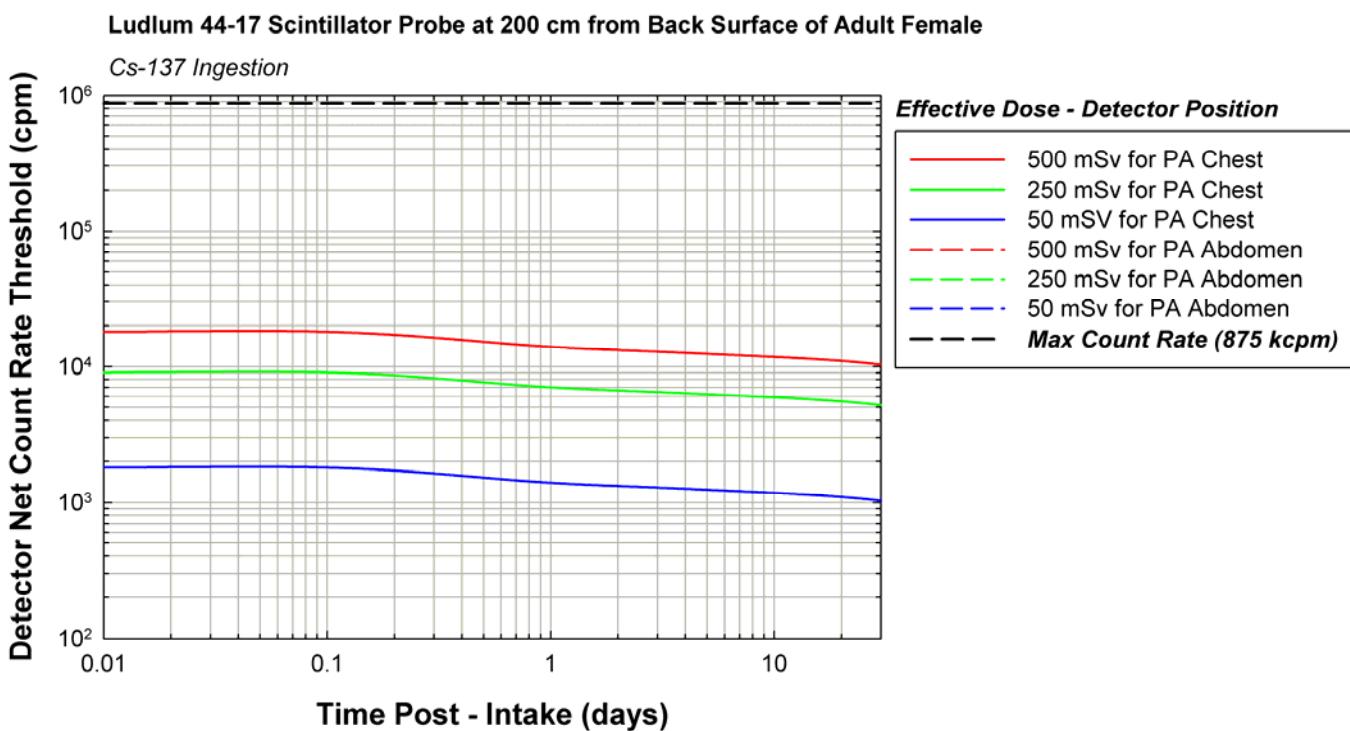
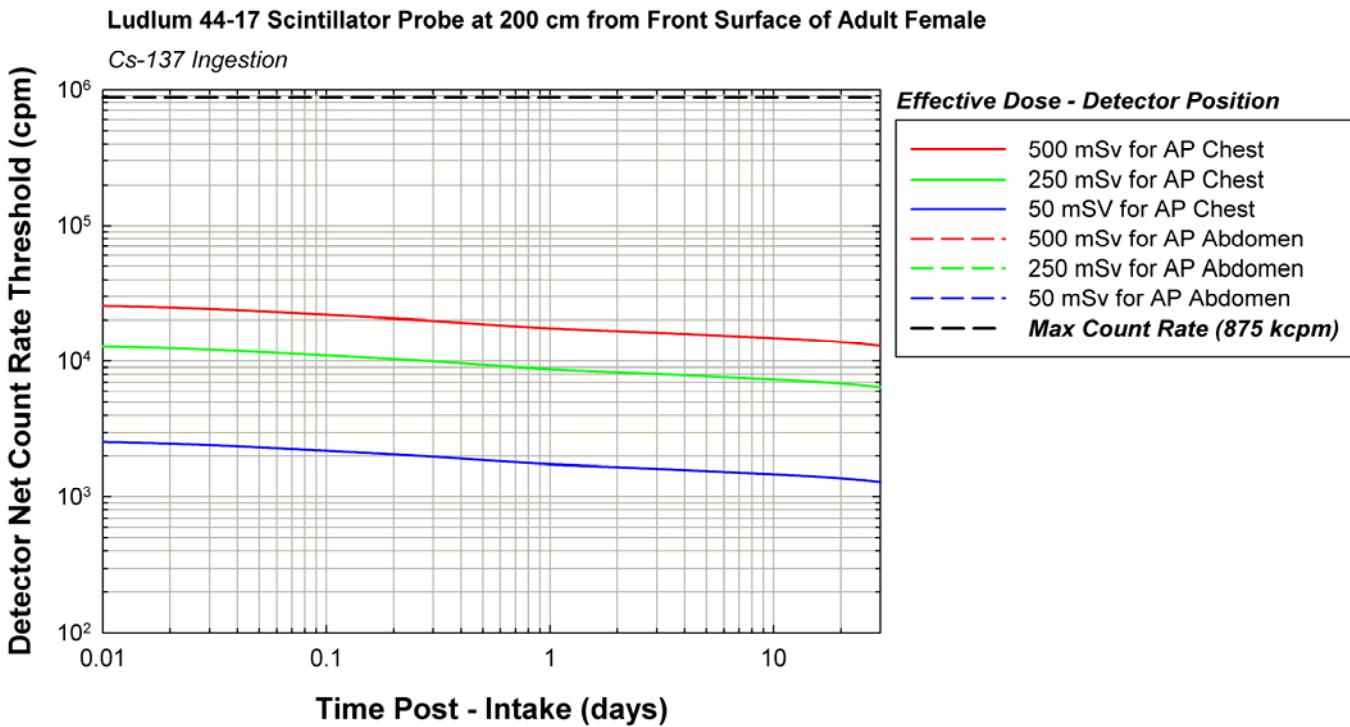
**Table D11 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cesium-137, Ingestion,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D11 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cesium-137, Ingestion,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D11 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Cesium-137, Ingestion,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D12 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iodine-131, Inhalation, 1-μm AMAD Aerosol, Type F, f<sub>A</sub> = 1.00 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	1.87E+05	1.14E+05	1.06E+05	7.74E+04	9.36E+05	5.70E+05	5.30E+05	3.87E+05	1.87E+06	1.14E+06	1.06E+06	7.74E+05		
	1	1.87E+05	1.10E+05	1.04E+05	7.41E+04	9.36E+05	5.49E+05	5.22E+05	3.71E+05	1.87E+06	1.10E+06	1.04E+06	7.41E+05		
	2	1.80E+05	9.85E+04	1.00E+05	6.65E+04	9.02E+05	4.92E+05	5.01E+05	3.32E+05	1.80E+06	9.85E+05	1.00E+06	6.65E+05		
	4	1.59E+05	8.14E+04	8.72E+04	5.48E+04	7.93E+05	4.07E+05	4.36E+05	2.74E+05	1.59E+06	8.14E+05	8.72E+05	5.48E+05		
	6	1.38E+05	6.70E+04	7.46E+04	4.48E+04	6.89E+05	3.35E+05	3.73E+05	2.24E+05	1.38E+06	6.70E+05	7.46E+05	4.48E+05		
	8	1.20E+05	5.47E+04	6.42E+04	3.63E+04	6.02E+05	2.74E+05	3.21E+05	1.82E+05	1.20E+06	5.47E+05	6.42E+05	3.63E+05		
	10	1.06E+05	4.45E+04	5.57E+04	2.94E+04	5.31E+05	2.23E+05	2.79E+05	1.47E+05	1.06E+06	4.45E+05	5.57E+05	2.94E+05		
	12	9.45E+04	3.62E+04	4.88E+04	2.37E+04	4.73E+05	1.81E+05	2.44E+05	1.18E+05	9.45E+05	3.62E+05	4.88E+05	2.37E+05		
	14	8.53E+04	2.98E+04	4.35E+04	1.93E+04	4.26E+05	1.49E+05	2.17E+05	9.66E+04	8.53E+05	2.98E+05	4.35E+05	1.93E+05		
	16	7.76E+04	2.46E+04	3.91E+04	1.58E+04	3.88E+05	1.23E+05	1.95E+05	7.90E+04	7.76E+05	2.46E+05	3.91E+05	1.58E+05		
	18	7.13E+04	2.04E+04	3.55E+04	1.30E+04	3.56E+05	1.02E+05	1.78E+05	6.48E+04	7.13E+05	2.04E+05	3.55E+05	1.30E+05		
	20	6.60E+04	1.70E+04	3.26E+04	1.07E+04	3.30E+05	8.49E+04	1.63E+05	5.35E+04	6.60E+05	1.70E+05	3.26E+05	1.07E+05		
1	5.80E+04	1.21E+04	2.83E+04	7.48E+03	2.90E+05	6.05E+04	1.42E+05	3.74E+04	5.80E+05	1.21E+05	2.83E+05	7.48E+04			
2	3.93E+04	3.90E+03	1.96E+04	2.41E+03	1.97E+05	1.95E+04	9.80E+04	1.20E+04	3.93E+05	3.90E+04	1.96E+05	2.41E+04			
3	3.33E+04	2.96E+03	1.71E+04	1.98E+03	1.67E+05	1.48E+04	8.56E+04	9.91E+03	3.33E+05	2.96E+04	1.71E+05	1.98E+04			
4	2.96E+04	2.70E+03	1.54E+04	1.88E+03	1.48E+05	1.35E+04	7.72E+04	9.38E+03	2.96E+05	2.70E+04	1.54E+05	1.88E+04			
5	2.68E+04	2.57E+03	1.40E+04	1.80E+03	1.34E+05	1.28E+04	7.01E+04	8.99E+03	2.68E+05	2.57E+04	1.40E+05	1.80E+04			
6	2.43E+04	2.46E+03	1.28E+04	1.72E+03	1.22E+05	1.23E+04	6.39E+04	8.62E+03	2.43E+05	2.46E+04	1.28E+05	1.72E+04			
7	2.21E+04	2.35E+03	1.17E+04	1.65E+03	1.11E+05	1.18E+04	5.83E+04	8.24E+03	2.21E+05	2.35E+04	1.17E+05	1.65E+04			
8	2.02E+04	2.25E+03	1.06E+04	1.57E+03	1.01E+05	1.12E+04	5.31E+04	7.84E+03	2.02E+05	2.25E+04	1.06E+05	1.57E+04			
9	1.84E+04	2.13E+03	9.70E+03	1.49E+03	9.18E+04	1.07E+04	4.85E+04	7.43E+03	1.84E+05	2.13E+04	9.70E+04	1.49E+04			
10	1.67E+04	2.02E+03	8.84E+03	1.40E+03	8.37E+04	1.01E+04	4.42E+04	7.02E+03	1.67E+05	2.02E+04	8.84E+04	1.40E+04			
15	1.17E+04	1.52E+03	6.18E+03	1.05E+03	5.84E+04	7.62E+03	3.09E+04	5.27E+03	1.17E+05	1.52E+04	6.18E+04	1.05E+04			
20	6.62E+03	1.03E+03	3.52E+03	7.04E+02	3.31E+04	5.14E+03	1.76E+04	3.52E+03	6.62E+04	1.03E+04	3.52E+04	7.04E+03			
25	4.62E+03	7.44E+02	2.46E+03	5.09E+02	2.31E+04	3.72E+03	1.23E+04	2.54E+03	4.62E+04	7.44E+03	2.46E+04	5.09E+03			
30	2.62E+03	4.60E+02	1.40E+03	3.13E+02	1.31E+04	2.30E+03	7.01E+03	1.57E+03	2.62E+04	4.60E+03	1.40E+04	3.13E+03			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	5.77E+04	4.27E+04	3.13E+04	3.23E+04	2.89E+05	2.13E+05	1.57E+05	1.62E+05	5.77E+05	4.27E+05	3.13E+05	3.23E+05		
	1	5.65E+04	4.13E+04	3.09E+04	3.15E+04	2.83E+05	2.07E+05	1.55E+05	1.57E+05	5.65E+05	4.13E+05	3.09E+05	3.15E+05		
	2	5.35E+04	3.79E+04	2.95E+04	2.91E+04	2.68E+05	1.90E+05	1.48E+05	1.45E+05	5.35E+05	3.79E+05	2.95E+05	2.91E+05		
	4	4.75E+04	3.22E+04	2.59E+04	2.44E+04	2.37E+05	1.61E+05	1.30E+05	1.22E+05	4.75E+05	3.22E+05	2.59E+05	2.44E+05		
	6	4.20E+04	2.73E+04	2.24E+04	2.03E+04	2.10E+05	1.37E+05	1.12E+05	1.02E+05	4.20E+05	2.73E+05	2.24E+05	2.03E+05		
	8	3.73E+04	2.32E+04	1.94E+04	1.68E+04	1.87E+05	1.16E+05	9.69E+04	8.42E+04	3.73E+05	2.32E+05	1.94E+05	1.68E+05		
	10	3.34E+04	1.97E+04	1.69E+04	1.40E+04	1.67E+05	9.85E+04	8.45E+04	6.99E+04	3.34E+05	1.97E+05	1.69E+05	1.40E+05		
	12	3.01E+04	1.69E+04	1.49E+04	1.17E+04	1.51E+05	8.44E+04	7.43E+04	5.84E+04	3.01E+05	1.69E+05	1.49E+05	1.17E+05		
	14	2.75E+04	1.47E+04	1.33E+04	9.88E+03	1.38E+05	7.33E+04	6.64E+04	4.94E+04	2.75E+05	1.47E+05	1.33E+05	9.88E+04		
	16	2.53E+04	1.28E+04	1.20E+04	8.43E+03	1.27E+05	6.42E+04	5.98E+04	4.22E+04	2.53E+05	1.28E+05	1.20E+05	8.43E+04		
	18	2.35E+04	1.13E+04	1.09E+04	7.26E+03	1.17E+05	5.67E+04	5.45E+04	3.63E+04	2.35E+05	1.13E+05	1.09E+05	7.26E+04		
	20	2.19E+04	1.01E+04	1.00E+04	6.32E+03	1.10E+05	5.06E+04	5.01E+04	3.16E+04	2.19E+05	1.01E+05	1.00E+05	6.32E+04		
1	1.95E+04	8.31E+03	8.72E+03	4.96E+03	9.74E+04	4.16E+04	4.36E+04	2.48E+04	1.95E+05	8.31E+04	8.72E+04	4.96E+04			
2	1.33E+04	4.69E+03	6.00E+03	2.58E+03	6.67E+04	2.35E+04	3.00E+04	1.29E+04	1.33E+05	4.69E+04	6.00E+04	2.58E+04			
3	1.12E+04	3.87E+03	5.21E+03	2.19E+03	5.60E+04	1.93E+04	2.61E+04	1.09E+04	1.12E+05	3.87E+04	5.21E+04	2.19E+04			
4	9.92E+03	3.44E+03	4.70E+03	1.99E+03	4.96E+04	1.72E+04	2.35E+04	9.94E+03	9.92E+04	3.44E+04	4.70E+04	1.99E+04			
5	8.95E+03	3.13E+03	4.28E+03	1.83E+03	4.48E+04	1.57E+04	2.14E+04	9.13E+03	8.95E+04	3.13E+04	4.28E+04	1.83E+04			
6	8.14E+03	2.87E+03	3.90E+03	1.68E+03	4.07E+04	1.44E+04	1.95E+04	8.42E+03	8.14E+04	2.87E+04	3.90E+04	1.68E+04			
7	7.42E+03	2.64E+03	3.57E+03	1.55E+03	3.71E+04	1.32E+04	1.78E+04	7.77E+03	7.42E+04	2.64E+04	3.57E+04	1.55E+04			
8	6.77E+03	2.43E+03	3.26E+03	1.43E+03	3.38E+04	1.21E+04	1.63E+04	7.17E+03	6.77E+04	2.43E+04	3.26E+04	1.43E+04			
9	6.17E+03	2.23E+03	2.98E+03	1.32E+03	3.09E+04	1.12E+04	1.49E+04	6.61E+03	6.17E+04	2.23E+04	2.98E+04	1.32E+04			
10	5.63E+03	2.05E+03	2.73E+03	1.22E+03	2.82E+04	1.03E+04	1.36E+04	6.09E+03	5.63E+04	2.05E+04	2.73E+04	1			

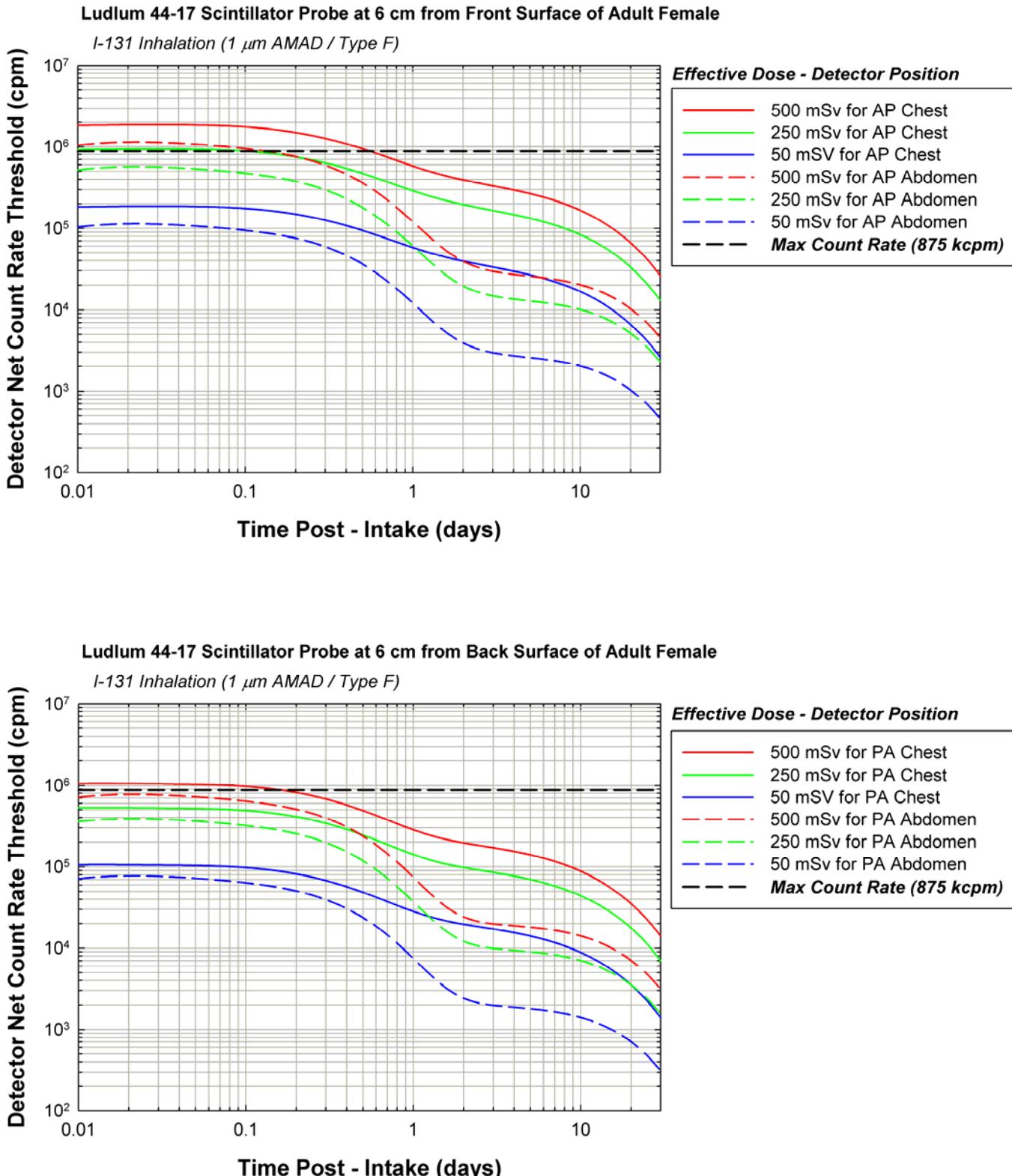
**Table D12 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iodine-131, Inhalation, 1-μm AMAD Aerosol, Type F, f<sub>A</sub> = 1.00 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	1.01E+04	9.27E+03	6.21E+03	5.94E+03	5.04E+04	4.64E+04	3.11E+04	2.97E+04	1.01E+05	9.27E+04	6.21E+04	5.94E+04		
	1	9.93E+03	9.03E+03	6.15E+03	5.74E+03	4.97E+04	4.52E+04	3.08E+04	2.87E+04	9.93E+04	9.03E+04	6.15E+04	5.74E+04		
	2	9.41E+03	8.47E+03	5.88E+03	5.36E+03	4.71E+04	4.24E+04	2.94E+04	2.68E+04	9.41E+04	8.47E+04	5.88E+04	5.36E+04		
	4	8.32E+03	7.44E+03	5.17E+03	4.63E+03	4.16E+04	3.72E+04	2.58E+04	2.32E+04	8.32E+04	7.44E+04	5.17E+04	4.63E+04		
	6	7.31E+03	6.51E+03	4.47E+03	3.95E+03	3.65E+04	3.25E+04	2.24E+04	1.98E+04	7.31E+04	6.51E+04	4.47E+04	3.95E+04		
	8	6.44E+03	5.71E+03	3.88E+03	3.37E+03	3.22E+04	2.85E+04	1.94E+04	1.68E+04	6.44E+04	5.71E+04	3.88E+04	3.37E+04		
	10	5.71E+03	5.04E+03	3.38E+03	2.88E+03	2.86E+04	2.52E+04	1.69E+04	1.44E+04	5.71E+04	5.04E+04	3.38E+04	2.88E+04		
	12	5.10E+03	4.48E+03	2.97E+03	2.49E+03	2.55E+04	2.24E+04	1.49E+04	1.24E+04	5.10E+04	4.48E+04	2.97E+04	2.49E+04		
	14	4.62E+03	4.03E+03	2.65E+03	2.18E+03	2.31E+04	2.02E+04	1.33E+04	1.09E+04	4.62E+04	4.03E+04	2.65E+04	2.18E+04		
	16	4.21E+03	3.66E+03	2.39E+03	1.92E+03	2.11E+04	1.83E+04	1.19E+04	9.62E+03	4.21E+04	3.66E+04	2.39E+04	1.92E+04		
	18	3.88E+03	3.35E+03	2.17E+03	1.72E+03	1.94E+04	1.68E+04	1.09E+04	8.59E+03	3.88E+04	3.35E+04	2.17E+04	1.72E+04		
	20	3.59E+03	3.09E+03	1.99E+03	1.55E+03	1.80E+04	1.55E+04	9.97E+03	7.75E+03	3.59E+04	3.09E+04	1.99E+04	1.55E+04		
1	3.15E+03	2.69E+03	1.73E+03	1.30E+03	1.58E+04	1.35E+04	8.63E+03	6.51E+03	3.15E+04	2.69E+04	1.73E+04	1.30E+04			
2	2.09E+03	1.75E+03	1.16E+03	8.17E+02	1.05E+04	8.74E+03	5.79E+03	4.09E+03	2.09E+04	1.75E+04	1.16E+04	8.17E+03			
3	1.75E+03	1.45E+03	9.96E+02	7.02E+02	8.74E+03	7.26E+03	4.98E+03	3.51E+03	1.75E+04	1.45E+04	9.96E+03	7.02E+03			
4	1.55E+03	1.28E+03	8.95E+02	6.33E+02	7.74E+03	6.42E+03	4.47E+03	3.17E+03	1.55E+04	1.28E+04	8.95E+03	6.33E+03			
5	1.40E+03	1.16E+03	8.14E+02	5.78E+02	7.00E+03	5.81E+03	4.07E+03	2.89E+03	1.40E+04	1.16E+04	8.14E+03	5.78E+03			
6	1.27E+03	1.06E+03	7.43E+02	5.30E+02	6.37E+03	5.29E+03	3.72E+03	2.65E+03	1.27E+04	1.06E+04	7.43E+03	5.30E+03			
7	1.16E+03	9.66E+02	6.80E+02	4.87E+02	5.81E+03	4.83E+03	3.40E+03	2.43E+03	1.16E+04	9.66E+03	6.80E+03	4.87E+03			
8	1.06E+03	8.84E+02	6.22E+02	4.47E+02	5.31E+03	4.42E+03	3.11E+03	2.23E+03	1.06E+04	8.84E+03	6.22E+03	4.47E+03			
9	9.70E+02	8.08E+02	5.69E+02	4.10E+02	4.85E+03	4.04E+03	2.85E+03	2.05E+03	9.70E+03	8.08E+03	5.69E+03	4.10E+03			
10	8.86E+02	7.39E+02	5.21E+02	3.76E+02	4.43E+03	3.69E+03	2.60E+03	1.88E+03	8.86E+03	7.39E+03	5.21E+03	3.76E+03			
15	5.66E+02	4.73E+02	3.34E+02	2.44E+02	2.83E+03	2.37E+03	1.67E+03	1.22E+03	5.66E+03	4.73E+03	3.34E+03	2.44E+03			
20	3.57E+02	3.00E+02	2.12E+02	1.57E+02	1.79E+03	1.50E+03	1.06E+03	7.83E+02	3.57E+03	3.00E+03	2.12E+03	1.57E+03			
25	2.50E+02	2.10E+02	1.49E+02	1.10E+02	1.25E+03	1.05E+03	7.43E+02	5.51E+02	2.50E+03	2.10E+03	1.49E+03	1.10E+03			
30	1.43E+02	1.21E+02	8.53E+01	6.37E+01	7.15E+02	6.03E+02	4.27E+02	3.19E+02	1.43E+03	1.21E+03	8.53E+02	6.37E+02			

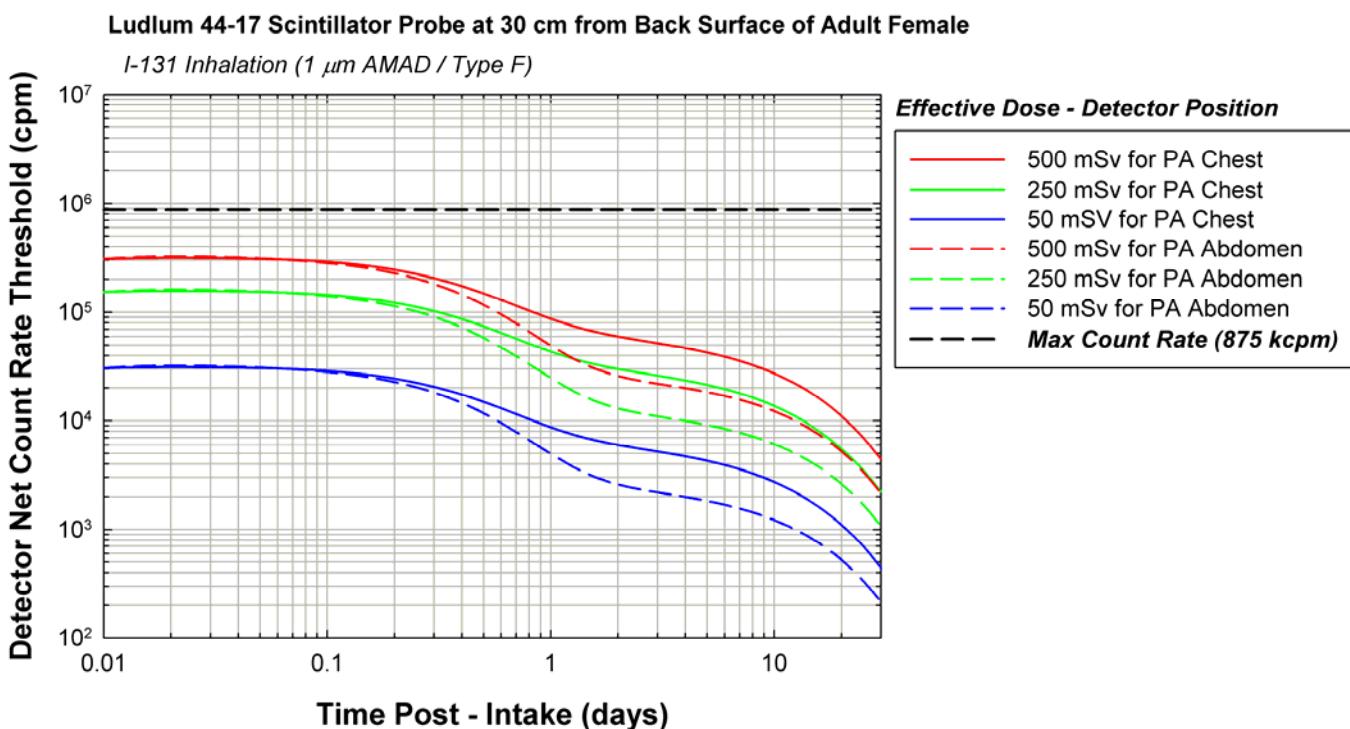
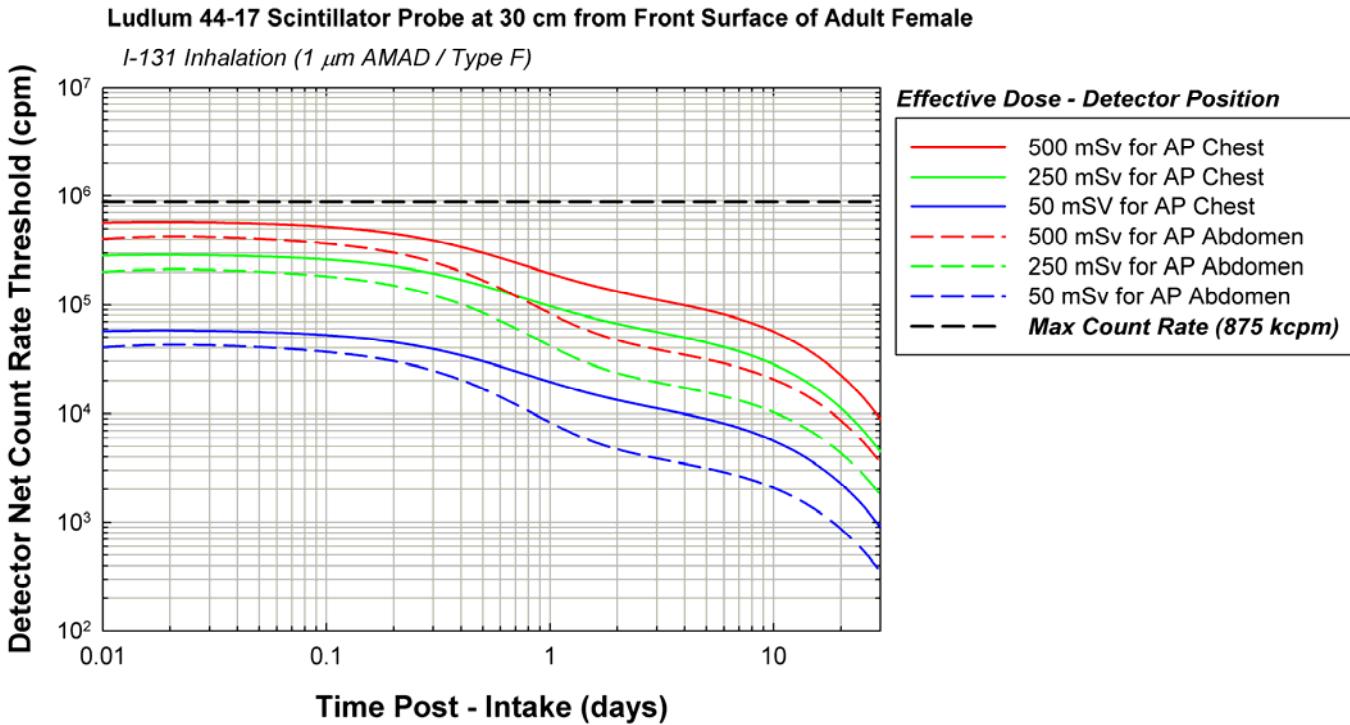
  

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	2.65E+03	2.65E+03	1.74E+03	1.74E+03	1.33E+04	1.33E+04	8.70E+03	8.70E+03	2.65E+04	2.65E+04	1.74E+04	1.74E+04		
	1	2.59E+03	2.59E+03	1.73E+03	1.73E+03	1.30E+04	1.30E+04	8.63E+03	8.63E+03	2.59E+04	2.59E+04	1.73E+04	1.73E+04		
	2	2.45E+03	2.45E+03	1.65E+03	1.65E+03	1.23E+04	1.23E+04	8.24E+03	8.24E+03	2.45E+04	2.45E+04	1.65E+04	1.65E+04		
	4	2.18E+03	2.18E+03	1.45E+03	1.45E+03	1.09E+04	1.09E+04	7.23E+03	7.23E+03	2.18E+04	2.18E+04	1.45E+04	1.45E+04		
	6	1.93E+03	1.93E+03	1.25E+03	1.25E+03	9.67E+03	9.67E+03	6.24E+03	6.24E+03	1.93E+04	1.93E+04	1.25E+04	1.25E+04		
	8	1.72E+03	1.72E+03	1.07E+03	1.07E+03	8.59E+03	8.59E+03	5.37E+03	5.37E+03	1.72E+04	1.72E+04	1.07E+04	1.07E+04		
	10	1.54E+03	1.54E+03	9.32E+02	9.32E+02	7.68E+03	7.68E+03	4.66E+03	4.66E+03	1.54E+04	1.54E+04	9.32E+03	9.32E+03		
	12	1.38E+03	1.38E+03	8.15E+02	8.15E+02	6.91E+03	6.91E+03	4.07E+03	4.07E+03	1.38E+04	1.38E+04	8.15E+03	8.15E+03		
	14	1.26E+03	1.26E+03	7.23E+02	7.23E+02	6.30E+03	6.30E+03	3.62E+03	3.62E+03	1.26E+04	1.26E+04	7.23E+03	7.23E+03		
	16	1.16E+03	1.16E+03	6.49E+02	6.49E+02	5.78E+03	5.78E+03	3.25E+03	3.25E+03	1.16E+04	1.16E+04	6.49E+03	6.49E+03		
	18	1.07E+03	1.07E+03	5.89E+02	5.89E+02	5.34E+03	5.34E+03	2.94E+03	2.94E+03	1.07E+04	1.07E+04	5.89E+03	5.89E+03		
	20	9.95E+02	9.95E+02	5.39E+02	5.39E+02	4.98E+03	4.98E+03	2.70E+03	2.70E+03	9.95E+03	9.95E+03	5.39E+03	5.39E+03		
1	8.81E+02	8.81E+02	4.67E+02	4.67E+02	4.40E+03	4.40E+03	2.34E+03	2.34E+03	8.81E+03	8.81E+03	4.67E+03	4.67E+03			
2	5.97E+02	5.97E+02	3.25E+02	3.25E+02	2.98E+03	2.98E+03	1.63E+03	1.63E+03	5.97E+03	5.97E+03	3.25E+03	3.25E+03			
3	5.00E+02	5.00E+02	2.87E+02	2.87E+02	2.50E+03	2.50E+03	1.43E+03	1.43E+03	5.00E+03	5.00E+03	2.87E+03	2.87E+03			
4	4.43E+02	4.43E+02	2.61E+02	2.61E+02	2.22E+03	2.22E+03	1.30E+03	1.30E+03	4.43E+03	4.43E+03	2.61E+03	2.61E+03			
5	4.01E+02	4.01E+02	2.38E+02	2.38E+02	2.00E+03	2.00E+03	1.19E+03	1.19E+03	4.01E+03	4.01E+03	2.38E+03	2.38E+03			
6	3.65E+02	3.65E+02	2.18E+02	2.18E+02	1.83E+03	1.83E+03	1.09E+03	1.09E+03	3.65E+03	3.65E+03	2.18E+03	2.18E+03			
7	3.33E+02	3.33E+02	2.00E+02	2.00E+02	1.67E+03	1.67E+03	9.99E+02	9.99E+02	3.33E+03	3.33E+03	2.00E+03	2.00E+03			
8	3.05E+02	3.05E+02	1.83E+02	1.83E+02	1.52E+03	1.52E+03	9.15E+02	9.15E+02	3.05E+03	3.05E+03	1.83E+03	1.83E+03			
9	2.78E+02	2.78E+02	1.68E+02	1.68E+02	1.39E+03	1.39E+03	8.38E+02	8.38E+02	2.78E+03	2.78E+03	1.68E+03	1.68E+03			
10	2.55E+02	2.55E+02	1.53E+02	1.53E+02	1.27E+03	1.27E+03	7.67E+02	7.67E+02	2.55E+03	2.55E+03	1.53E+03				

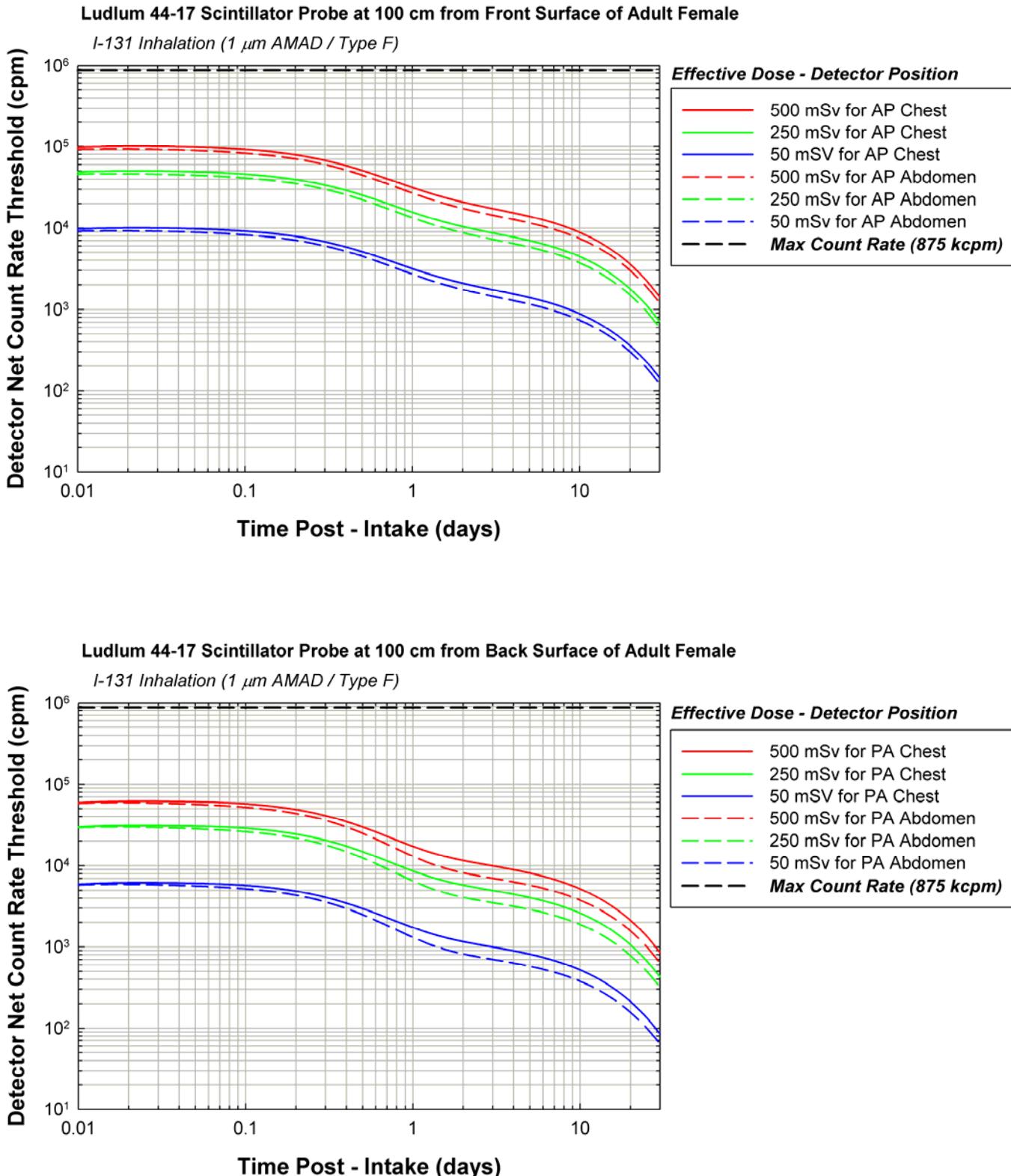
**Table D12 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iodine-131, Inhalation, 1- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



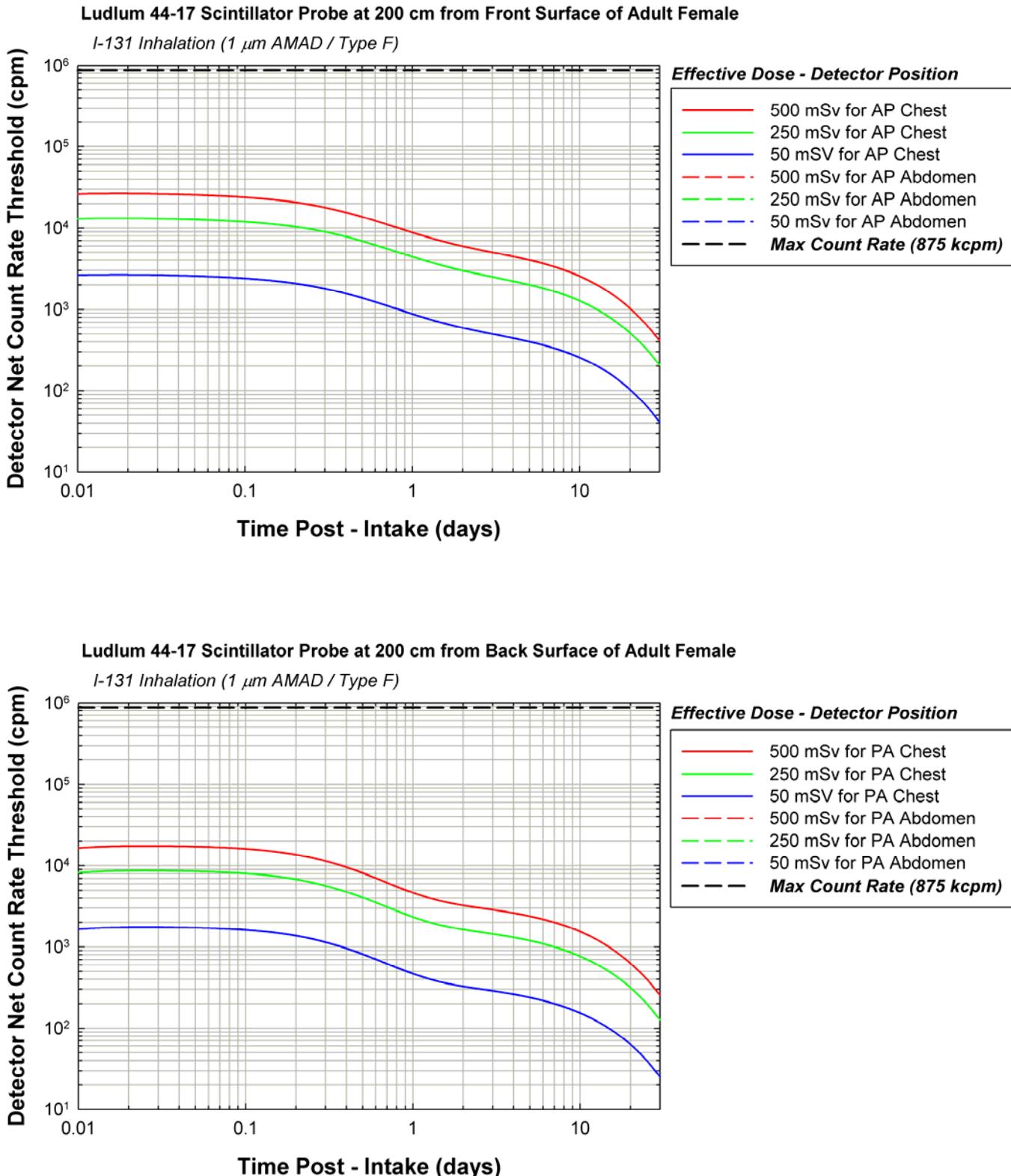
**Table D12 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iodine-131, Inhalation, 1- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D12 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iodine-131, Inhalation, 1- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D12 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iodine-131, Inhalation, 1- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D13 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iodine-131, Inhalation, 5-μm AMAD Aerosol, Type F, f<sub>A</sub> = 1.00 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	1.92E+05	1.22E+05	1.02E+05	8.08E+04	9.62E+05	6.09E+05	5.12E+05	4.04E+05	1.92E+06	1.22E+06	1.02E+06	8.08E+05		
	1	1.95E+05	1.11E+05	1.04E+05	7.39E+04	9.77E+05	5.57E+05	5.18E+05	3.70E+05	1.95E+06	1.11E+06	1.04E+06	7.39E+05		
	2	1.90E+05	9.38E+04	1.00E+05	6.21E+04	9.52E+05	4.69E+05	5.01E+05	3.11E+05	1.90E+06	9.38E+05	1.00E+06	6.21E+05		
	4	1.68E+05	7.26E+04	8.72E+04	4.78E+04	8.41E+05	3.63E+05	4.36E+05	2.39E+05	1.68E+06	7.26E+05	8.72E+05	4.78E+05		
	6	1.47E+05	5.84E+04	7.46E+04	3.81E+04	7.33E+05	2.92E+05	3.73E+05	1.90E+05	1.47E+06	5.84E+05	7.46E+05	3.81E+05		
	8	1.29E+05	4.75E+04	6.43E+04	3.06E+04	6.43E+05	2.38E+05	3.22E+05	1.53E+05	1.29E+06	4.75E+05	6.43E+05	3.06E+05		
	10	1.14E+05	3.89E+04	5.60E+04	2.47E+04	5.70E+05	1.94E+05	2.80E+05	1.24E+05	1.14E+06	3.89E+05	5.60E+05	2.47E+05		
	12	1.02E+05	3.19E+04	4.93E+04	2.00E+04	5.09E+05	1.60E+05	2.47E+05	1.00E+05	1.02E+06	3.19E+05	4.93E+05	2.00E+05		
	14	9.20E+04	2.66E+04	4.40E+04	1.64E+04	4.60E+05	1.33E+05	2.20E+05	8.22E+04	9.20E+05	2.66E+05	4.40E+05	1.64E+05		
	16	8.39E+04	2.22E+04	3.97E+04	1.36E+04	4.19E+05	1.11E+05	1.99E+05	6.78E+04	8.39E+05	2.22E+05	3.97E+05	1.36E+05		
	18	7.71E+04	1.87E+04	3.62E+04	1.12E+04	3.85E+05	9.34E+04	1.81E+05	5.62E+04	7.71E+05	1.87E+05	3.62E+05	1.12E+05		
	20	7.14E+04	1.58E+04	3.33E+04	9.38E+03	3.57E+05	7.91E+04	1.67E+05	4.69E+04	7.14E+05	1.58E+05	3.33E+05	9.38E+04		
1	6.25E+04	1.17E+04	2.90E+04	6.72E+03	3.12E+05	5.83E+04	1.45E+05	3.36E+04	6.25E+05	1.17E+05	2.90E+05	6.72E+04			
2	4.08E+04	4.15E+03	1.98E+04	2.41E+03	2.04E+05	2.08E+04	9.91E+04	1.21E+04	4.08E+05	4.15E+04	1.98E+05	2.41E+04			
3	3.36E+04	3.05E+03	1.71E+04	1.99E+03	1.68E+05	1.53E+04	8.55E+04	9.94E+03	3.36E+05	3.05E+04	1.71E+05	1.99E+04			
4	2.96E+04	2.72E+03	1.53E+04	1.87E+03	1.48E+05	1.36E+04	7.67E+04	9.33E+03	2.96E+05	2.72E+04	1.53E+05	1.87E+04			
5	2.66E+04	2.56E+03	1.39E+04	1.78E+03	1.33E+05	1.28E+04	6.95E+04	8.92E+03	2.66E+05	2.56E+04	1.39E+05	1.78E+04			
6	2.41E+04	2.44E+03	1.27E+04	1.71E+03	1.21E+05	1.22E+04	6.33E+04	8.54E+03	2.41E+05	2.44E+04	1.27E+05	1.71E+04			
7	2.19E+04	2.33E+03	1.15E+04	1.63E+03	1.10E+05	1.17E+04	5.77E+04	8.15E+03	2.19E+05	2.33E+04	1.15E+05	1.63E+04			
8	2.00E+04	2.22E+03	1.05E+04	1.55E+03	9.98E+04	1.11E+04	5.26E+04	7.76E+03	2.00E+05	2.22E+04	1.05E+05	1.55E+04			
9	1.82E+04	2.11E+03	9.60E+03	1.47E+03	9.10E+04	1.06E+04	4.80E+04	7.35E+03	1.82E+05	2.11E+04	9.60E+04	1.47E+04			
10	1.66E+04	2.00E+03	8.76E+03	1.39E+03	8.29E+04	1.00E+04	4.38E+04	6.95E+03	1.66E+05	2.00E+04	8.76E+04	1.39E+04			
15	1.16E+04	1.51E+03	6.13E+03	1.04E+03	5.78E+04	7.54E+03	3.06E+04	5.21E+03	1.16E+05	1.51E+04	6.13E+04	1.04E+04			
20	6.56E+03	1.02E+03	3.49E+03	6.96E+02	3.28E+04	5.08E+03	1.75E+04	3.48E+03	6.56E+04	1.02E+04	3.49E+04	6.96E+03			
25	4.58E+03	7.36E+02	2.44E+03	5.03E+02	2.29E+04	3.68E+03	1.22E+04	2.52E+03	4.58E+04	7.36E+03	2.44E+04	5.03E+03			
30	2.60E+03	4.55E+02	1.39E+03	3.10E+02	1.30E+04	2.27E+03	6.94E+03	1.55E+03	2.60E+04	4.55E+03	1.39E+04	3.10E+03			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	6.33E+04	4.59E+04	3.16E+04	3.28E+04	3.17E+05	2.29E+05	1.58E+05	1.64E+05	6.33E+05	4.59E+05	3.16E+05	3.28E+05		
	1	6.16E+04	4.32E+04	3.12E+04	3.14E+04	3.08E+05	2.16E+05	1.56E+05	1.57E+05	6.16E+05	4.32E+05	3.12E+05	3.14E+05		
	2	5.77E+04	3.82E+04	2.94E+04	2.81E+04	2.88E+05	1.91E+05	1.47E+05	1.41E+05	5.77E+05	3.82E+05	2.94E+05	2.81E+05		
	4	5.06E+04	3.14E+04	2.54E+04	2.29E+04	2.53E+05	1.57E+05	1.27E+05	1.14E+05	5.06E+05	3.14E+05	2.54E+05	2.29E+05		
	6	4.48E+04	2.64E+04	2.18E+04	1.88E+04	2.24E+05	1.32E+05	1.09E+05	9.39E+04	4.48E+05	2.64E+05	2.18E+05	1.88E+05		
	8	4.00E+04	2.25E+04	1.90E+04	1.56E+04	2.00E+05	1.12E+05	9.48E+04	7.78E+04	4.00E+05	2.25E+05	1.90E+05	1.56E+05		
	10	3.60E+04	1.93E+04	1.66E+04	1.30E+04	1.80E+05	9.65E+04	8.32E+04	6.49E+04	3.60E+05	1.93E+05	1.66E+05	1.30E+05		
	12	3.27E+04	1.67E+04	1.48E+04	1.09E+04	1.63E+05	8.36E+04	7.38E+04	5.46E+04	3.27E+05	1.67E+05	1.48E+05	1.09E+05		
	14	2.99E+04	1.47E+04	1.33E+04	9.32E+03	1.50E+05	7.35E+04	6.64E+04	4.66E+04	2.99E+05	1.47E+05	1.33E+05	9.32E+04		
	16	2.76E+04	1.30E+04	1.20E+04	8.03E+03	1.38E+05	6.51E+04	6.02E+04	4.02E+04	2.76E+05	1.30E+05	1.20E+05	8.03E+04		
	18	2.57E+04	1.16E+04	1.10E+04	6.98E+03	1.28E+05	5.82E+04	5.52E+04	3.49E+04	2.57E+05	1.16E+05	1.10E+05	6.98E+04		
	20	2.40E+04	1.05E+04	1.02E+04	6.14E+03	1.20E+05	5.24E+04	5.10E+04	3.07E+04	2.40E+05	1.05E+05	1.02E+05	6.14E+04		
1	2.13E+04	8.74E+03	8.94E+03	4.90E+03	1.06E+05	4.37E+04	4.47E+04	4.25E+04	2.13E+05	8.74E+04	8.94E+04	4.90E+04			
2	1.39E+04	4.92E+03	6.10E+03	2.62E+03	6.97E+04	2.46E+04	3.05E+04	1.31E+04	1.39E+05	4.92E+04	6.10E+04	2.62E+04			
3	1.13E+04	3.93E+03	5.22E+03	2.20E+03	5.67E+04	1.96E+04	2.61E+04	1.10E+04	1.13E+05	3.93E+04	5.22E+04	2.20E+04			
4	9.91E+03	3.44E+03	4.67E+03	1.98E+03	4.95E+04	1.72E+04	2.34E+04	9.89E+03	9.91E+04	3.44E+04	4.67E+04	1.98E+04			
5	8.90E+03	3.11E+03	4.24E+03	1.81E+03	4.45E+04	1.56E+04	2.12E+04	9.06E+03	8.90E+04	3.11E+04	4.24E+04	1.81E+04			
6	8.07E+03	2.85E+03	3.87E+03	1.67E+03	4.03E+04	1.42E+04	1.93E+04	8.35E+03	8.07E+04	2.85E+04	3.87E+04	1.67E+04			
7	7.35E+03	2.62E+03	3.54E+03	1.54E+03	3.67E+04	1.31E+04	1.77E+04	7.70E+03	7.35E+04	2.62E+04	3.54E+04	1.54E+04			
8	6.70E+03	2.41E+03	3.23E+03	1.42E+03	3.35E+04	1.20E+04	1.62E+04	7.10E+03	6.70E+04	2.41E+04	3.23E+04	1.42E+04			
9	6.11E+03	2.21E+03	2.95E+03	1.31E+03	3.06E+04	1.11E+04	1.48E+04	6.55E+03	6.11E+04	2.21E+04	2.95E+04	1.31E+04			
10	5.58E+03	2.03E+03	2.70E+03	1.21E+03	2.79E+04	1.02E+04	1.35E+04	6.03E+03	5.58E+04	2.03E+04	2.70E+04	1			

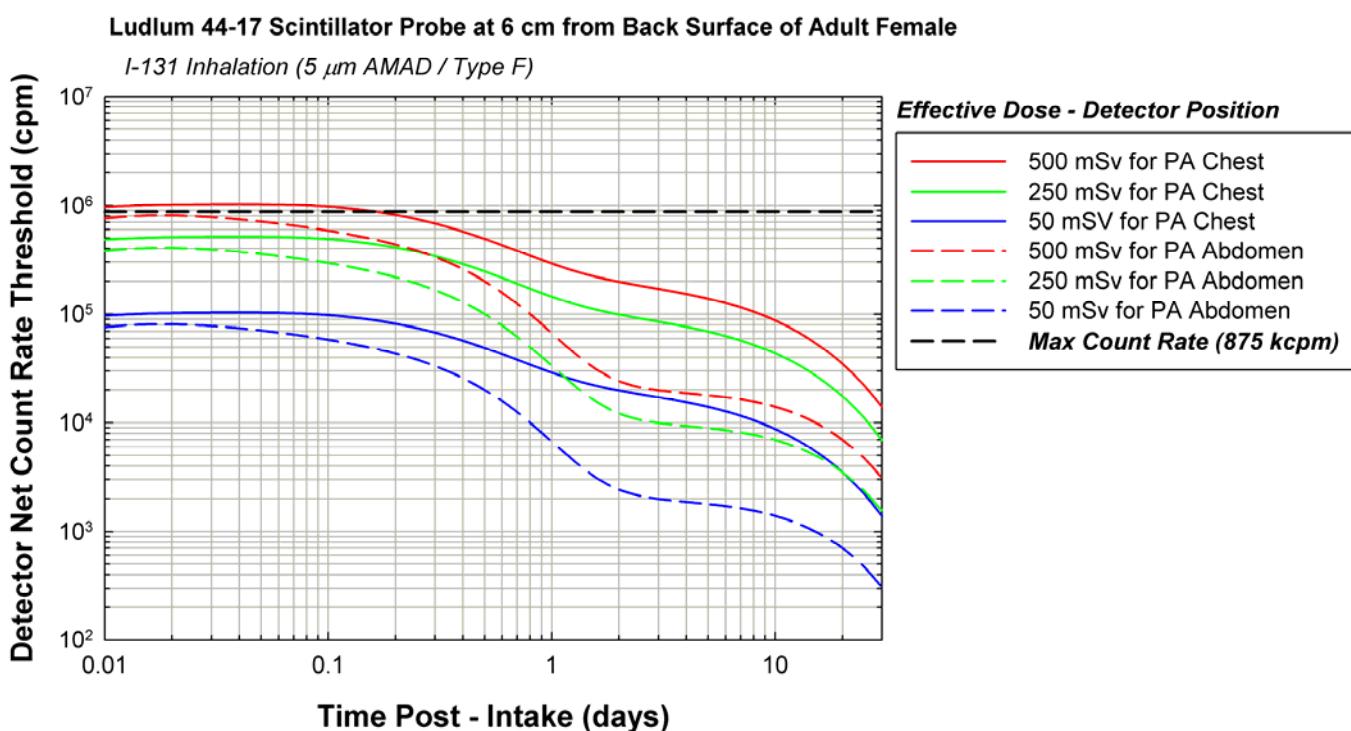
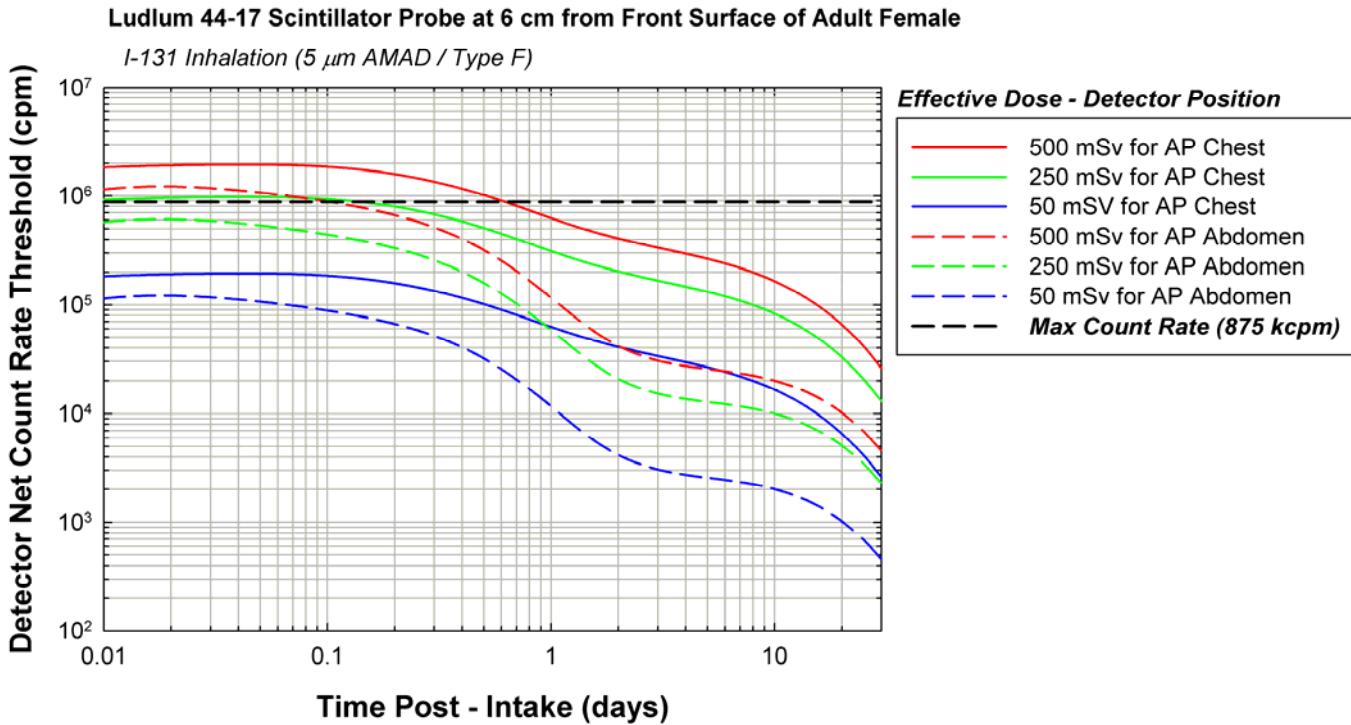
**Table D13 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iodine-131, Inhalation, 5-μm AMAD Aerosol, Type F, f<sub>A</sub> = 1.00 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	1.10E+04	1.02E+04	6.37E+03	6.09E+03	5.51E+04	5.11E+04	3.19E+04	3.04E+04	1.10E+05	1.02E+05	6.37E+04	6.09E+04		
	1	1.07E+04	9.78E+03	6.28E+03	5.80E+03	5.36E+04	4.89E+04	3.14E+04	2.90E+04	1.07E+05	9.78E+04	6.28E+04	5.80E+04		
	2	9.99E+03	8.96E+03	5.89E+03	5.25E+03	5.00E+04	4.48E+04	2.94E+04	2.63E+04	9.99E+04	8.96E+04	5.89E+04	5.25E+04		
	4	8.70E+03	7.71E+03	5.07E+03	4.39E+03	4.35E+04	3.85E+04	2.53E+04	2.19E+04	8.70E+04	7.71E+04	5.07E+04	4.39E+04		
	6	7.64E+03	6.73E+03	4.37E+03	3.71E+03	3.82E+04	3.36E+04	2.19E+04	1.86E+04	7.64E+04	6.73E+04	4.37E+04	3.71E+04		
	8	6.77E+03	5.94E+03	3.80E+03	3.17E+03	3.38E+04	2.97E+04	1.90E+04	1.59E+04	6.77E+04	5.94E+04	3.80E+04	3.17E+04		
	10	6.05E+03	5.29E+03	3.34E+03	2.74E+03	3.02E+04	2.64E+04	1.67E+04	1.37E+04	6.05E+04	5.29E+04	3.34E+04	2.74E+04		
	12	5.45E+03	4.74E+03	2.97E+03	2.39E+03	2.72E+04	2.37E+04	1.48E+04	1.19E+04	5.45E+04	4.74E+04	2.97E+04	2.39E+04		
	14	4.96E+03	4.31E+03	2.67E+03	2.11E+03	2.48E+04	2.15E+04	1.34E+04	1.06E+04	4.96E+04	4.31E+04	2.67E+04	2.11E+04		
	16	4.55E+03	3.94E+03	2.42E+03	1.89E+03	2.27E+04	1.97E+04	1.21E+04	9.44E+03	4.55E+04	3.94E+04	2.42E+04	1.89E+04		
	18	4.20E+03	3.62E+03	2.22E+03	1.70E+03	2.10E+04	1.81E+04	1.11E+04	8.51E+03	4.20E+04	3.62E+04	2.22E+04	1.70E+04		
	20	3.90E+03	3.35E+03	2.05E+03	1.55E+03	1.95E+04	1.68E+04	1.02E+04	7.75E+03	3.90E+04	3.35E+04	2.05E+04	1.55E+04		
1	3.43E+03	2.93E+03	1.79E+03	1.32E+03	1.72E+04	1.47E+04	8.94E+03	6.60E+03	3.43E+04	2.93E+04	1.79E+04	1.32E+04			
2	2.19E+03	1.84E+03	1.19E+03	8.35E+02	1.10E+04	9.19E+03	5.94E+03	4.18E+03	2.19E+04	1.84E+04	1.19E+04	8.35E+03			
3	1.77E+03	1.48E+03	1.00E+03	7.04E+02	8.87E+03	7.38E+03	5.00E+03	3.52E+03	1.77E+04	1.48E+04	1.00E+04	7.04E+03			
4	1.55E+03	1.28E+03	8.91E+02	6.30E+02	7.74E+03	6.42E+03	4.45E+03	3.15E+03	1.55E+04	1.28E+04	8.91E+03	6.30E+03			
5	1.39E+03	1.15E+03	8.07E+02	5.74E+02	6.95E+03	5.77E+03	4.04E+03	2.87E+03	1.39E+04	1.15E+04	8.07E+03	5.74E+03			
6	1.26E+03	1.05E+03	7.36E+02	5.25E+02	6.32E+03	5.25E+03	3.68E+03	2.63E+03	1.26E+04	1.05E+04	7.36E+03	5.25E+03			
7	1.15E+03	9.58E+02	6.73E+02	4.82E+02	5.76E+03	4.79E+03	3.37E+03	2.41E+03	1.15E+04	9.58E+03	6.73E+03	4.82E+03			
8	1.05E+03	8.75E+02	6.16E+02	4.43E+02	5.26E+03	4.38E+03	3.08E+03	2.21E+03	1.05E+04	8.75E+03	6.16E+03	4.43E+03			
9	9.61E+02	8.00E+02	5.64E+02	4.06E+02	4.80E+03	4.00E+03	2.82E+03	2.03E+03	9.61E+03	8.00E+03	5.64E+03	4.06E+03			
10	8.78E+02	7.32E+02	5.16E+02	3.73E+02	4.39E+03	3.66E+03	2.58E+03	1.86E+03	8.78E+03	7.32E+03	5.16E+03	3.73E+03			
15	5.60E+02	4.69E+02	3.31E+02	2.42E+02	2.80E+03	2.34E+03	1.65E+03	1.21E+03	5.60E+03	4.69E+03	3.31E+03	2.42E+03			
20	3.54E+02	2.97E+02	2.10E+02	1.55E+02	1.77E+03	1.49E+03	1.05E+03	7.75E+02	3.54E+03	2.97E+03	2.10E+03	1.55E+03			
25	2.48E+02	2.08E+02	1.47E+02	1.09E+02	1.24E+03	1.04E+03	7.36E+02	5.45E+02	2.48E+03	2.08E+03	1.47E+03	1.09E+03			
30	1.42E+02	1.19E+02	8.45E+01	6.31E+01	7.08E+02	5.97E+02	4.22E+02	3.16E+02	1.42E+03	1.19E+03	8.45E+02	6.31E+02			

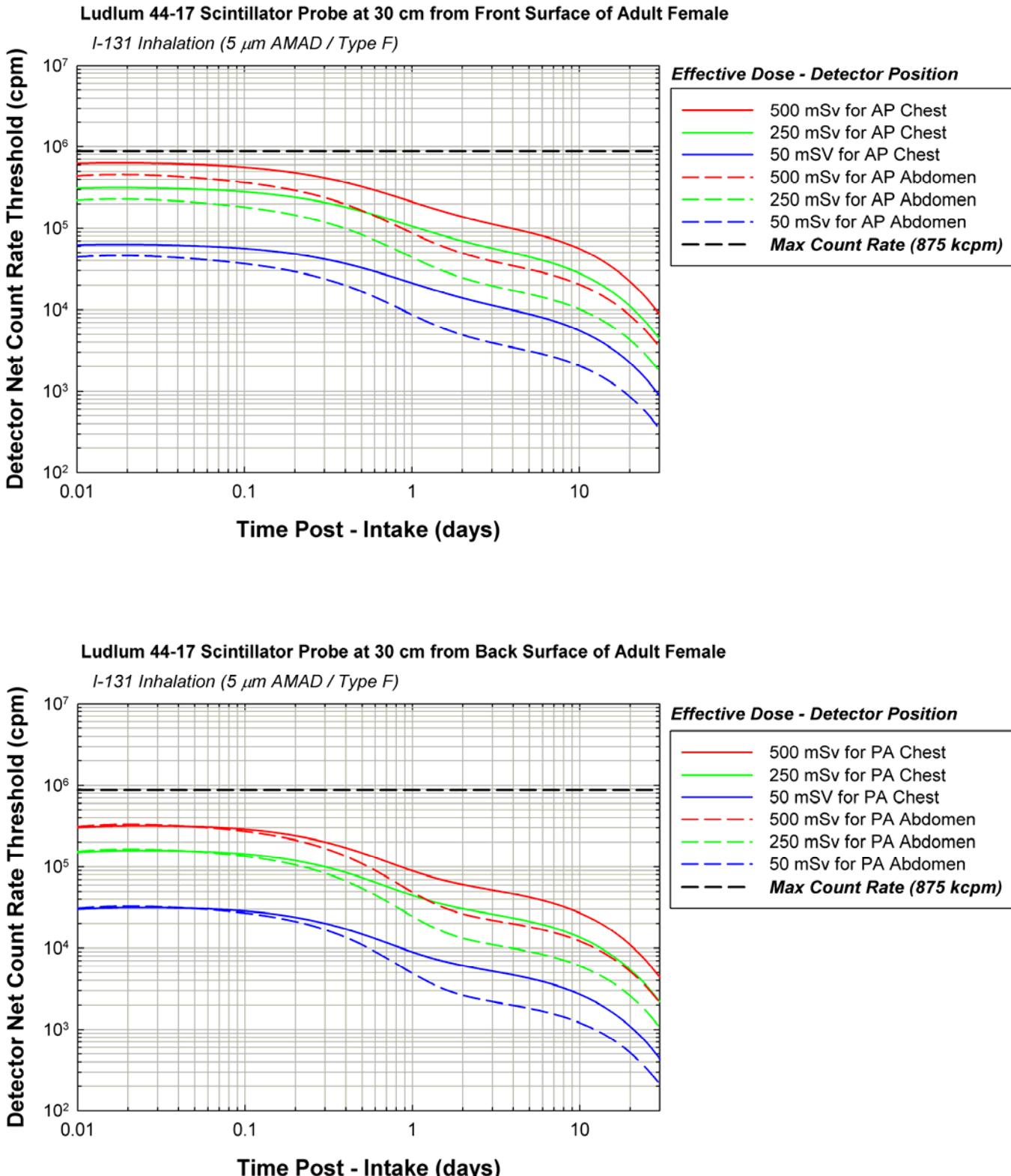
  

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	2.94E+03	2.94E+03	1.73E+03	1.73E+03	1.47E+04	1.47E+04	8.65E+03	8.65E+03	2.94E+04	2.94E+04	1.73E+04	1.73E+04		
	1	2.82E+03	2.82E+03	1.70E+03	1.70E+03	1.41E+04	1.41E+04	8.50E+03	8.50E+03	2.82E+04	2.82E+04	1.70E+04	1.70E+04		
	2	2.61E+03	2.61E+03	1.58E+03	1.58E+03	1.30E+04	1.30E+04	7.92E+03	7.92E+03	2.61E+04	2.61E+04	1.58E+04	1.58E+04		
	4	2.27E+03	2.27E+03	1.35E+03	1.35E+03	1.14E+04	1.14E+04	6.75E+03	6.75E+03	2.27E+04	2.27E+04	1.35E+04	1.35E+04		
	6	2.01E+03	2.01E+03	1.15E+03	1.15E+03	1.01E+04	1.01E+04	5.77E+03	5.77E+03	2.01E+04	2.01E+04	1.15E+04	1.15E+04		
	8	1.80E+03	1.80E+03	9.97E+02	9.97E+02	8.98E+03	8.98E+03	4.99E+03	4.99E+03	1.80E+04	1.80E+04	9.97E+03	9.97E+03		
	10	1.62E+03	1.62E+03	8.71E+02	8.71E+02	8.09E+03	8.09E+03	4.35E+03	4.35E+03	1.62E+04	1.62E+04	8.71E+03	8.71E+03		
	12	1.47E+03	1.47E+03	7.69E+02	7.69E+02	7.34E+03	7.34E+03	3.84E+03	3.84E+03	1.47E+04	1.47E+04	7.69E+03	7.69E+03		
	14	1.35E+03	1.35E+03	6.89E+02	6.89E+02	6.74E+03	6.74E+03	3.45E+03	3.45E+03	1.35E+04	1.35E+04	6.89E+03	6.89E+03		
	16	1.24E+03	1.24E+03	6.25E+02	6.25E+02	6.22E+03	6.22E+03	3.12E+03	3.12E+03	1.24E+04	1.24E+04	6.25E+03	6.25E+03		
	18	1.15E+03	1.15E+03	5.71E+02	5.71E+02	5.77E+03	5.77E+03	2.86E+03	2.86E+03	1.15E+04	1.15E+04	5.71E+03	5.71E+03		
	20	1.08E+03	1.08E+03	5.28E+02	5.28E+02	5.39E+03	5.39E+03	2.64E+03	2.64E+03	1.08E+04	1.08E+04	5.28E+03	5.28E+03		
1	9.57E+02	9.57E+02	4.63E+02	4.63E+02	4.78E+03	4.78E+03	2.31E+03	2.31E+03	9.57E+03	9.57E+03	4.63E+03	4.63E+03			
2	6.25E+02	6.25E+02	3.27E+02	3.27E+02	3.12E+03	3.12E+03	1.63E+03	1.63E+03	6.25E+03	6.25E+03	3.27E+03	3.27E+03			
3	5.07E+02	5.07E+02	2.86E+02	2.86E+02	2.54E+03	2.54E+03	1.43E+03	1.43E+03	5.07E+03	5.07E+03	2.86E+03	2.86E+03			
4	4.43E+02	4.43E+02	2.59E+02	2.59E+02	2.22E+03	2.22E+03	1.29E+03	1.29E+03	4.43E+03	4.43E+03	2.59E+03	2.59E+03			
5	3.98E+02	3.98E+02	2.36E+02	2.36E+02	1.99E+03	1.99E+03	1.18E+03	1.18E+03	3.98E+03	3.98E+03	2.36E+03	2.36E+03			
6	3.62E+02	3.62E+02	2.16E+02	2.16E+02	1.81E+03	1.81E+03	1.08E+03	1.08E+03	3.62E+03	3.62E+03	2.16E+03	2.16E+03			
7	3.30E+02	3.30E+02	1.98E+02	1.98E+02	1.65E+03	1.65E+03	9.90E+02	9.90E+02	3.30E+03	3.30E+03	1.98E+03	1.98E+03			
8	3.02E+02	3.02E+02	1.81E+02	1.81E+02	1.51E+03	1.51E+03	9.06E+02	9.06E+02	3.02E+03	3.02E+03	1.81E+03	1.81E+03			
9	2.76E+02	2.76E+02	1.66E+02	1.66E+02	1.38E+03	1.38E+03	8.30E+02	8.30E+02	2.76E+03	2.76E+03	1.66E+03	1.66E+03			
10	2.52E+02	2.52E+02	1.52E+02	1.52E+02	1.26E+03	1.26E+03	7.60E+02	7.60E+02	2.52E+03	2.52E+03	1.52E+03				

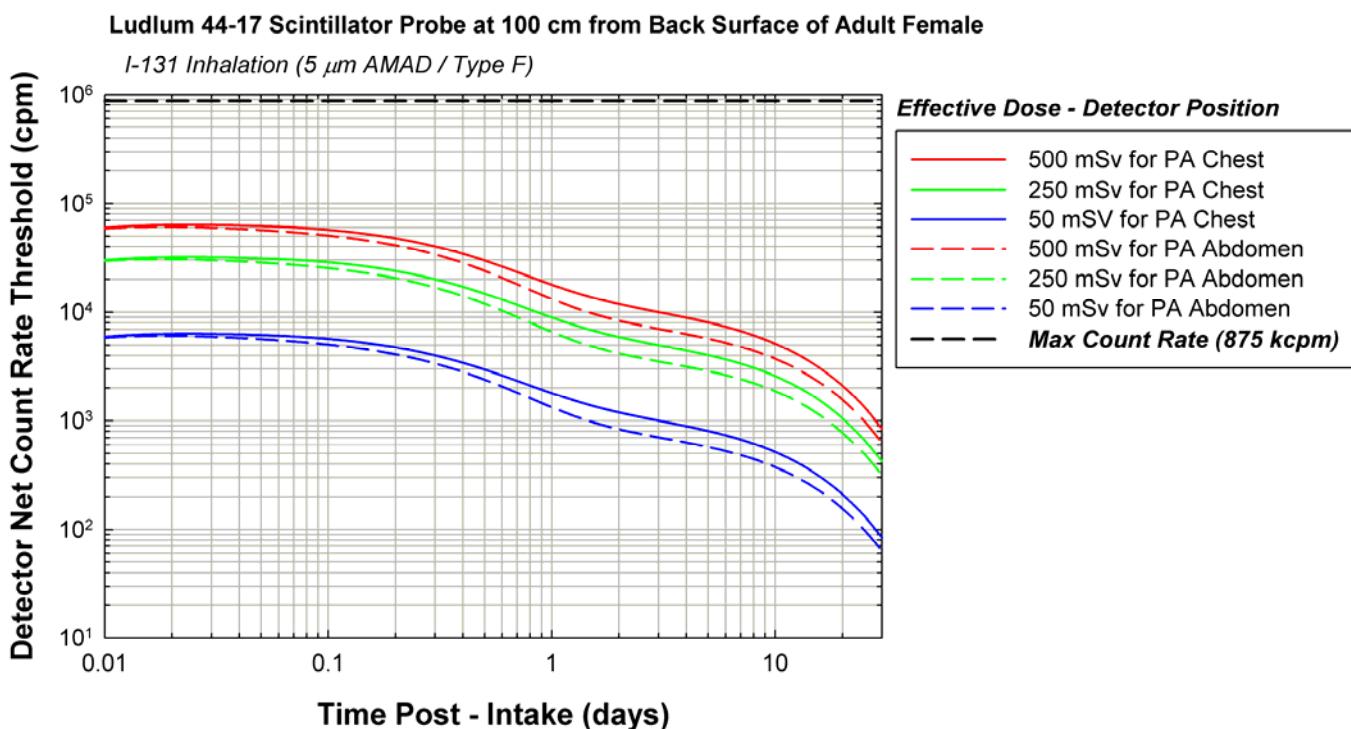
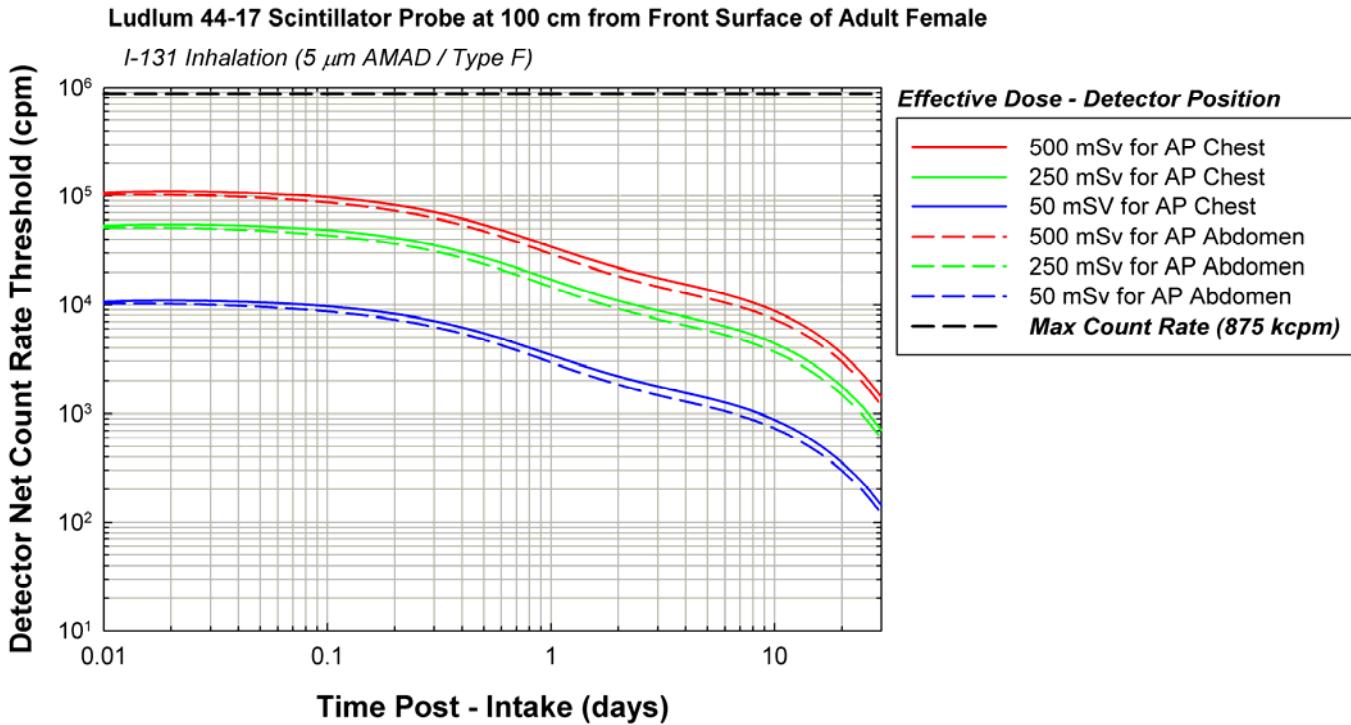
**Table D13 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iodine-131, Inhalation, 5- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



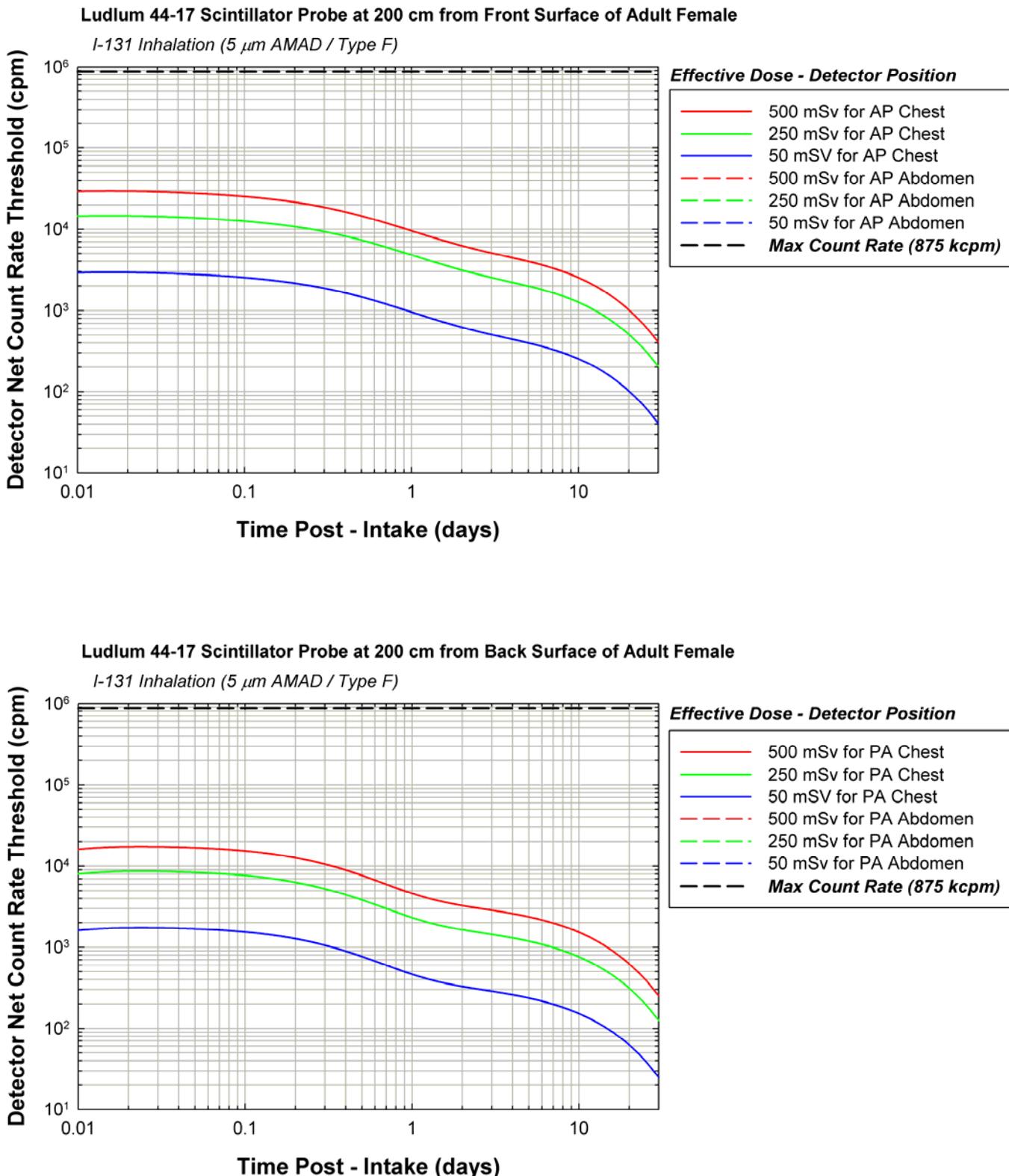
**Table D13 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iodine-131, Inhalation, 5- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D13 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iodine-131, Inhalation, 5- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D13 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iodine-131, Inhalation, 5- $\mu$ m AMAD Aerosol, Type F,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D14 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iodine-131, Ingestion,  $f_A = 1.00$  Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)																	
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED							
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen
	0.5	1.22E+05	1.55E+05	7.80E+04	1.04E+05	6.09E+05	7.74E+05	3.90E+05	5.22E+05	1.22E+06	1.55E+06	7.80E+05	1.04E+06				
	1	1.40E+05	1.33E+05	8.82E+04	9.02E+04	7.01E+05	6.63E+05	4.41E+05	4.51E+05	1.40E+06	1.33E+06	8.82E+05	9.02E+05				
	2	1.51E+05	1.08E+05	9.40E+04	7.43E+04	7.57E+05	5.41E+05	4.70E+05	3.71E+05	1.51E+06	1.08E+06	9.40E+05	7.43E+05				
	4	1.39E+05	8.56E+04	8.58E+04	5.88E+04	6.97E+05	4.28E+05	4.29E+05	2.94E+05	1.39E+06	8.56E+05	8.58E+05	5.88E+05				
	6	1.21E+05	7.03E+04	7.36E+04	4.81E+04	6.03E+05	3.52E+05	3.68E+05	2.40E+05	1.21E+06	7.03E+05	7.36E+05	4.81E+05				
	8	1.04E+05	5.75E+04	6.29E+04	3.91E+04	5.21E+05	2.87E+05	3.14E+05	1.96E+05	1.04E+06	5.75E+05	6.29E+05	3.91E+05				
	10	9.08E+04	4.68E+04	5.42E+04	3.16E+04	4.54E+05	2.34E+05	2.71E+05	1.58E+05	9.08E+05	4.68E+05	5.42E+05	3.16E+05				
	12	8.00E+04	3.80E+04	4.71E+04	2.55E+04	4.00E+05	1.90E+05	2.36E+05	1.28E+05	8.00E+05	3.80E+05	4.71E+05	2.55E+05				
	14	7.17E+04	3.12E+04	4.17E+04	2.08E+04	3.59E+05	1.56E+05	2.08E+05	1.04E+05	7.17E+05	3.12E+05	4.17E+05	2.08E+05				
	16	6.50E+04	2.56E+04	3.73E+04	1.70E+04	3.25E+05	1.28E+05	1.86E+05	8.49E+04	6.50E+05	2.56E+05	3.73E+05	1.70E+05				
	18	5.96E+04	2.12E+04	3.37E+04	1.39E+04	2.98E+05	1.06E+05	1.69E+05	6.96E+04	5.96E+05	2.12E+05	3.37E+05	1.39E+05				
	20	5.52E+04	1.76E+04	3.09E+04	1.15E+04	2.76E+05	8.82E+04	1.54E+05	5.74E+04	5.52E+05	1.76E+05	3.09E+05	1.15E+05				
1	4.88E+04	1.25E+04	2.68E+04	7.98E+03	2.44E+05	6.25E+04	1.34E+05	3.99E+04	4.88E+05	1.25E+05	2.68E+05	7.98E+04					
2	3.64E+04	3.98E+03	1.91E+04	2.49E+03	1.82E+05	1.99E+04	9.57E+04	1.25E+04	3.64E+05	3.98E+04	1.91E+05	2.49E+04					
3	3.27E+04	3.02E+03	1.71E+04	2.03E+03	1.64E+05	1.51E+04	8.57E+04	1.01E+04	3.27E+05	3.02E+04	1.71E+05	2.03E+04					
4	2.98E+04	2.76E+03	1.56E+04	1.91E+03	1.49E+05	1.38E+04	7.81E+04	9.56E+03	2.98E+05	2.76E+04	1.56E+05	1.91E+04					
5	2.71E+04	2.61E+03	1.42E+04	1.83E+03	1.36E+05	1.31E+04	7.12E+04	9.16E+03	2.71E+05	2.61E+04	1.42E+05	1.83E+04					
6	2.47E+04	2.50E+03	1.30E+04	1.75E+03	1.24E+05	1.25E+04	6.50E+04	8.77E+03	2.47E+05	2.50E+04	1.30E+05	1.75E+04					
7	2.25E+04	2.39E+03	1.19E+04	1.68E+03	1.13E+05	1.20E+04	5.93E+04	8.38E+03	2.25E+05	2.39E+04	1.19E+05	1.68E+04					
8	2.05E+04	2.28E+03	1.08E+04	1.59E+03	1.03E+05	1.14E+04	5.41E+04	7.97E+03	2.05E+05	2.28E+04	1.08E+05	1.59E+04					
9	1.87E+04	2.17E+03	9.87E+03	1.51E+03	9.35E+04	1.09E+04	4.94E+04	7.56E+03	1.87E+05	2.17E+04	9.87E+04	1.51E+04					
10	1.70E+04	2.06E+03	9.01E+03	1.43E+03	8.52E+04	1.03E+04	4.50E+04	7.14E+03	1.70E+05	2.06E+04	9.01E+04	1.43E+04					
15	1.19E+04	1.55E+03	6.30E+03	1.07E+03	5.95E+04	7.76E+03	3.15E+04	5.36E+03	1.19E+05	1.55E+04	6.30E+04	1.07E+04					
20	6.74E+03	1.05E+03	3.59E+03	7.17E+02	3.37E+04	5.23E+03	1.79E+04	3.58E+03	6.74E+04	1.05E+04	3.59E+04	7.17E+03					
25	4.71E+03	7.57E+02	2.51E+03	5.18E+02	2.35E+04	3.79E+03	1.25E+04	2.59E+03	4.71E+04	7.57E+03	2.51E+04	5.18E+03					
30	2.67E+03	4.68E+02	1.43E+03	3.19E+02	1.33E+04	2.34E+03	7.14E+03	1.59E+03	2.67E+04	4.68E+03	1.43E+04	3.19E+03					
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)																	
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED							
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen
	0.5	4.72E+04	4.78E+04	2.69E+04	3.50E+04	2.36E+05	2.39E+05	1.34E+05	1.75E+05	4.72E+05	4.78E+05	2.69E+05	3.50E+05				
	1	4.61E+04	4.29E+04	2.78E+04	3.30E+04	2.31E+05	2.15E+05	1.39E+05	1.65E+05	4.61E+05	4.29E+05	2.78E+05	3.30E+05				
	2	4.37E+04	3.71E+04	2.77E+04	3.00E+04	2.19E+05	1.85E+05	1.38E+05	1.50E+05	4.37E+05	3.71E+05	2.77E+05	3.00E+05				
	4	3.87E+04	3.05E+04	2.49E+04	2.51E+04	1.93E+05	1.53E+05	1.24E+05	1.26E+05	3.87E+05	3.05E+05	2.49E+05	2.51E+05				
	6	3.39E+04	2.56E+04	2.15E+04	2.09E+04	1.70E+05	1.28E+05	1.07E+05	1.04E+05	3.39E+05	2.56E+05	2.15E+05	2.09E+05				
	8	2.99E+04	2.15E+04	1.85E+04	1.72E+04	1.49E+05	1.08E+05	9.24E+04	8.62E+04	2.99E+05	2.15E+05	1.85E+05	1.72E+05				
	10	2.65E+04	1.81E+04	1.60E+04	1.42E+04	1.32E+05	9.05E+04	7.99E+04	7.12E+04	2.65E+05	1.81E+05	1.60E+05	1.42E+05				
	12	2.37E+04	1.53E+04	1.39E+04	1.18E+04	1.19E+05	7.66E+04	6.97E+04	5.91E+04	2.37E+05	1.53E+05	1.39E+05	1.18E+05				
	14	2.16E+04	1.31E+04	1.24E+04	9.93E+03	1.08E+05	6.57E+04	6.19E+04	4.96E+04	2.16E+05	1.31E+05	1.24E+05	9.93E+04				
	16	1.98E+04	1.14E+04	1.11E+04	8.41E+03	9.92E+04	5.70E+04	5.55E+04	4.21E+04	1.98E+05	1.14E+05	1.11E+05	8.41E+04				
	18	1.84E+04	9.98E+03	1.01E+04	7.19E+03	9.22E+04	4.99E+04	5.04E+04	3.60E+04	1.84E+05	9.98E+04	1.01E+05	7.19E+04				
	20	1.73E+04	8.84E+03	9.24E+03	6.22E+03	8.64E+04	4.42E+04	4.62E+04	3.11E+04	1.73E+05	8.84E+04	9.24E+04	6.22E+04				
1	1.56E+04	7.20E+03	8.03E+03	4.82E+03	7.79E+04	3.60E+04	4.02E+04	2.41E+04	1.56E+05	7.20E+04	8.03E+04	4.82E+04					
2	1.21E+04	4.32E+03	5.80E+03	2.51E+03	6.06E+04	2.16E+04	2.90E+04	1.26E+04	1.21E+05	4.32E+04	5.80E+04	2.51E+04					
3	1.09E+04	3.78E+03	5.20E+03	2.19E+03	5.45E+04	1.89E+04	2.60E+04	1.09E+04	1.09E+05	3.78E+04	5.20E+04	2.19E+04					
4	9.93E+03	3.45E+03	4.75E+03	2.01E+03	4.97E+04	1.73E+04	2.37E+04	1.00E+04	9.93E+04	3.45E+04	4.75E+04	2.01E+04					
5	9.06E+03	3.17E+03	4.34E+03	1.86E+03	4.53E+04	1.59E+04	2.17E+04	9.28E+03	9.06E+04	3.17E+04	4.34E+04	1.86E+04					
6	8.27E+03	2.92E+03	3.97E+03	1.71E+03	4.13E+04	1.46E+04	1.99E+04	8.57E+03	8.27E+04	2.92E+04	3.97E+04	1.71E+04					
7	7.55E+03	2.69E+03	3.63E+03	1.58E+03	3.77E+04	1.34E+04	1.82E+04	7.91E+03	7.55E+04	2.69E+04	3.63E+04	1.58E+04					
8	6.89E+03	2.47E+03	3.32E+03	1.46E+03	3.44E+04	1.24E+04	1.66E+04	7.30E+03	6.89E+04	2.47E+04	3.32E+04	1.46E+04					
9	6.29E+03	2.27E+03	3.04E+03	1.35E+03	3.14E+04	1.14E+04	1.52E+04	6.73E+03	6.29E+04	2.27E+04	3.04E+04	1.35E+04					
10	5.74E+03	2.09E+03	2.78E+03	1.24E+03	2.87E+04	1.05E+04	1.39E+04	6.20E+03	5.74E+04	2.09E+04	2.78E+04	1.24E+04					
15	4.01E+03	1.49E+03	1.95E+03	8.86E+02	2.01E+04	7.43E+03	9.75E+03	4.43E+03	4.01E+04	1.49E+04	1.95E+04	8.86E+03					
20	2.29E+03	8.82E+02	1.12E+03	5.31E+02	1.15E+04	4.41E+03	5.62E+03	2.66E+03	2.29E+04	8.82E+03	1.12E+04	5.31E+03					
25	1.60E+03	6.22E+02	7.87E+02	3.76E+02	8.01E+03	3.11E+03	3.93E+03	1.88E+03	1.60E+04	6.22E+03	7.87E+03	3.76E+03					
30	9.13E+02	3.62E+02	4.50E+02	2.20E+02	4.56E+03	1.81E+03	2.25E+03										

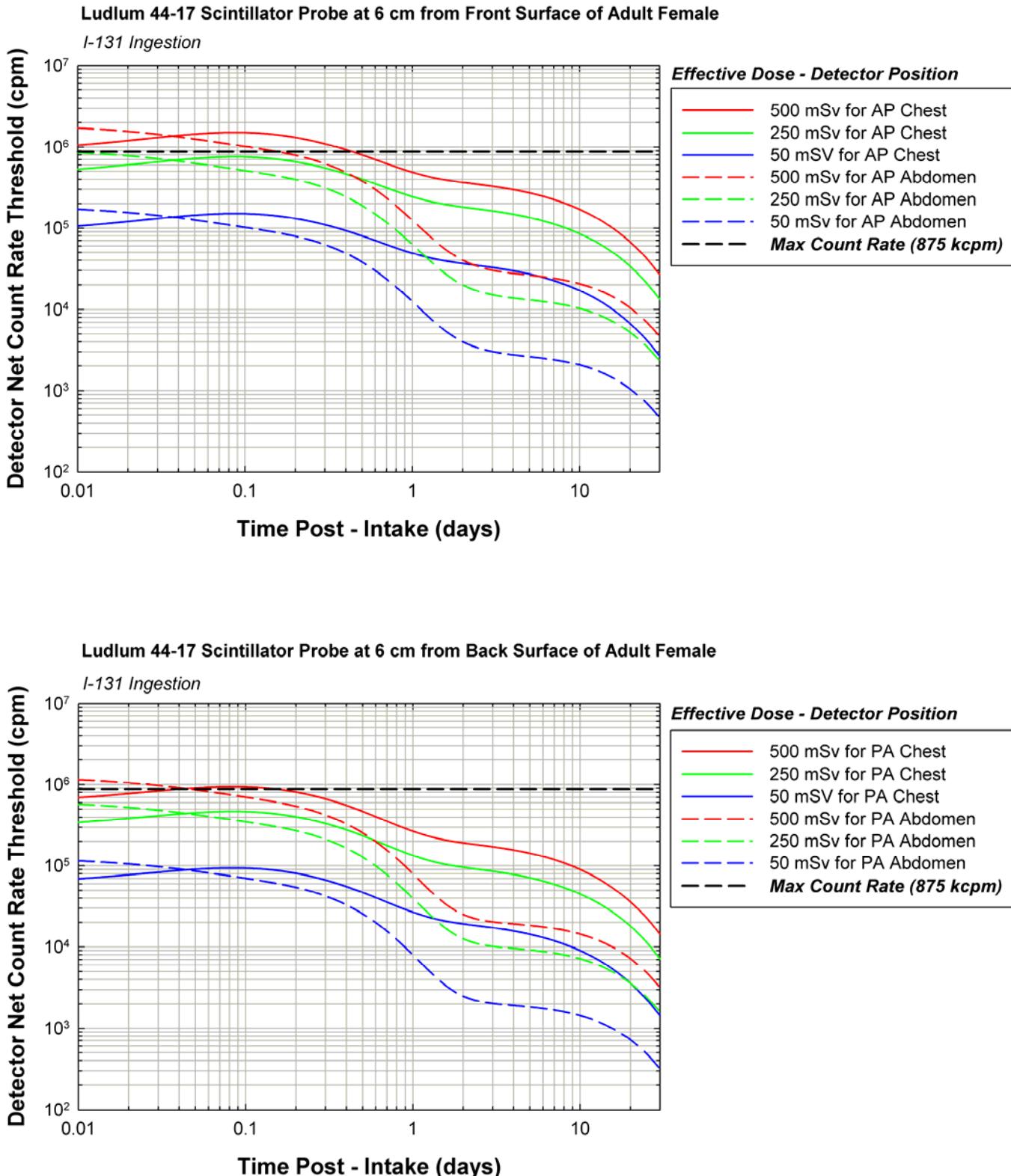
**Table D14 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iodine-131, Ingestion,  $f_A = 1.00$  Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	8.51E+03	8.55E+03	5.39E+03	6.03E+03	4.26E+04	4.27E+04	2.70E+04	3.01E+04	8.51E+04	8.55E+04	5.39E+04	6.03E+04		
	1	8.30E+03	7.99E+03	5.48E+03	5.71E+03	4.15E+04	3.99E+04	2.74E+04	2.86E+04	8.30E+04	7.99E+04	5.48E+04	5.71E+04		
	2	7.86E+03	7.25E+03	5.39E+03	5.25E+03	3.93E+04	3.63E+04	2.70E+04	2.63E+04	7.86E+04	7.25E+04	5.39E+04	5.25E+04		
	4	6.94E+03	6.25E+03	4.83E+03	4.51E+03	3.47E+04	3.13E+04	2.41E+04	2.26E+04	6.94E+04	6.25E+04	4.83E+04	4.51E+04		
	6	6.04E+03	5.41E+03	4.17E+03	3.84E+03	3.02E+04	2.70E+04	2.09E+04	1.92E+04	6.04E+04	5.41E+04	4.17E+04	3.84E+04		
	8	5.26E+03	4.69E+03	3.59E+03	3.25E+03	2.63E+04	2.34E+04	1.79E+04	1.63E+04	5.26E+04	4.69E+04	3.59E+04	3.25E+04		
	10	4.62E+03	4.09E+03	3.10E+03	2.76E+03	2.31E+04	2.04E+04	1.55E+04	1.38E+04	4.62E+04	4.09E+04	3.10E+04	2.76E+04		
	12	4.09E+03	3.60E+03	2.70E+03	2.36E+03	2.04E+04	1.80E+04	1.35E+04	1.18E+04	4.09E+04	3.60E+04	2.70E+04	2.36E+04		
	14	3.67E+03	3.21E+03	2.39E+03	2.05E+03	1.84E+04	1.61E+04	1.20E+04	1.02E+04	3.67E+04	3.21E+04	2.39E+04	2.05E+04		
	16	3.34E+03	2.90E+03	2.14E+03	1.80E+03	1.67E+04	1.45E+04	1.07E+04	8.98E+03	3.34E+04	2.90E+04	2.14E+04	1.80E+04		
	18	3.07E+03	2.65E+03	1.94E+03	1.59E+03	1.53E+04	1.33E+04	9.70E+03	7.96E+03	3.07E+04	2.65E+04	1.94E+04	1.59E+04		
	20	2.85E+03	2.45E+03	1.78E+03	1.43E+03	1.42E+04	1.22E+04	8.88E+03	7.15E+03	2.85E+04	2.45E+04	1.78E+04	1.43E+04		
1	2.53E+03	2.15E+03	1.54E+03	1.19E+03	1.26E+04	1.07E+04	7.69E+03	5.97E+03	2.53E+04	2.15E+04	1.54E+04	1.19E+04			
2	1.89E+03	1.57E+03	1.10E+03	7.82E+02	9.47E+03	7.87E+03	5.50E+03	3.91E+03	1.89E+04	1.57E+04	1.10E+04	7.82E+03			
3	1.70E+03	1.41E+03	9.87E+02	6.97E+02	8.50E+03	7.04E+03	4.94E+03	3.49E+03	1.70E+04	1.41E+04	9.87E+03	6.97E+03			
4	1.55E+03	1.28E+03	9.02E+02	6.39E+02	7.75E+03	6.42E+03	4.51E+03	3.19E+03	1.55E+04	1.28E+04	9.02E+03	6.39E+03			
5	1.42E+03	1.17E+03	8.25E+02	5.87E+02	7.08E+03	5.87E+03	4.13E+03	2.93E+03	1.42E+04	1.17E+04	8.25E+03	5.87E+03			
6	1.29E+03	1.07E+03	7.56E+02	5.39E+02	6.47E+03	5.37E+03	3.78E+03	2.70E+03	1.29E+04	1.07E+04	7.56E+03	5.39E+03			
7	1.18E+03	9.83E+02	6.92E+02	4.95E+02	5.91E+03	4.92E+03	3.46E+03	2.48E+03	1.18E+04	9.83E+03	6.92E+03	4.95E+03			
8	1.08E+03	8.99E+02	6.33E+02	4.55E+02	5.40E+03	4.50E+03	3.17E+03	2.27E+03	1.08E+04	8.99E+03	6.33E+03	4.55E+03			
9	9.88E+02	8.23E+02	5.79E+02	4.18E+02	4.94E+03	4.11E+03	2.90E+03	2.09E+03	9.88E+03	8.23E+03	5.79E+03	4.18E+03			
10	9.02E+02	7.52E+02	5.30E+02	3.83E+02	4.51E+03	3.76E+03	2.65E+03	1.92E+03	9.02E+03	7.52E+03	5.30E+03	3.83E+03			
15	5.76E+02	4.82E+02	3.40E+02	2.49E+02	2.88E+03	2.41E+03	1.70E+03	1.24E+03	5.76E+03	4.82E+03	3.40E+03	2.49E+03			
20	3.64E+02	3.05E+02	2.16E+02	1.59E+02	1.82E+03	1.53E+03	1.08E+03	7.97E+02	3.64E+03	3.05E+03	2.16E+03	1.59E+03			
25	2.55E+02	2.14E+02	1.51E+02	1.12E+02	1.27E+03	1.07E+03	7.57E+02	5.61E+02	2.55E+03	2.14E+03	1.51E+03	1.12E+03			
30	1.46E+02	1.23E+02	8.69E+01	6.49E+01	7.29E+02	6.14E+02	4.34E+02	3.24E+02	1.46E+03	1.23E+03	8.69E+02	6.49E+02			

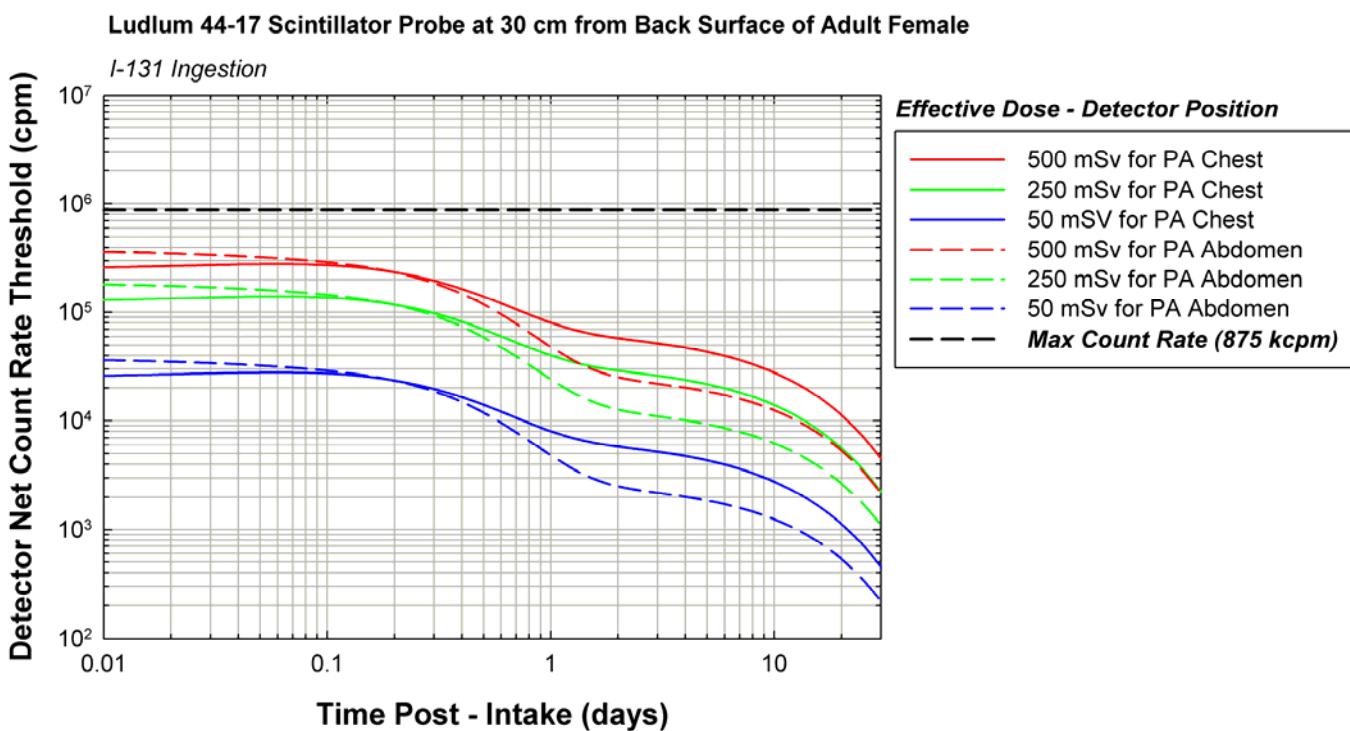
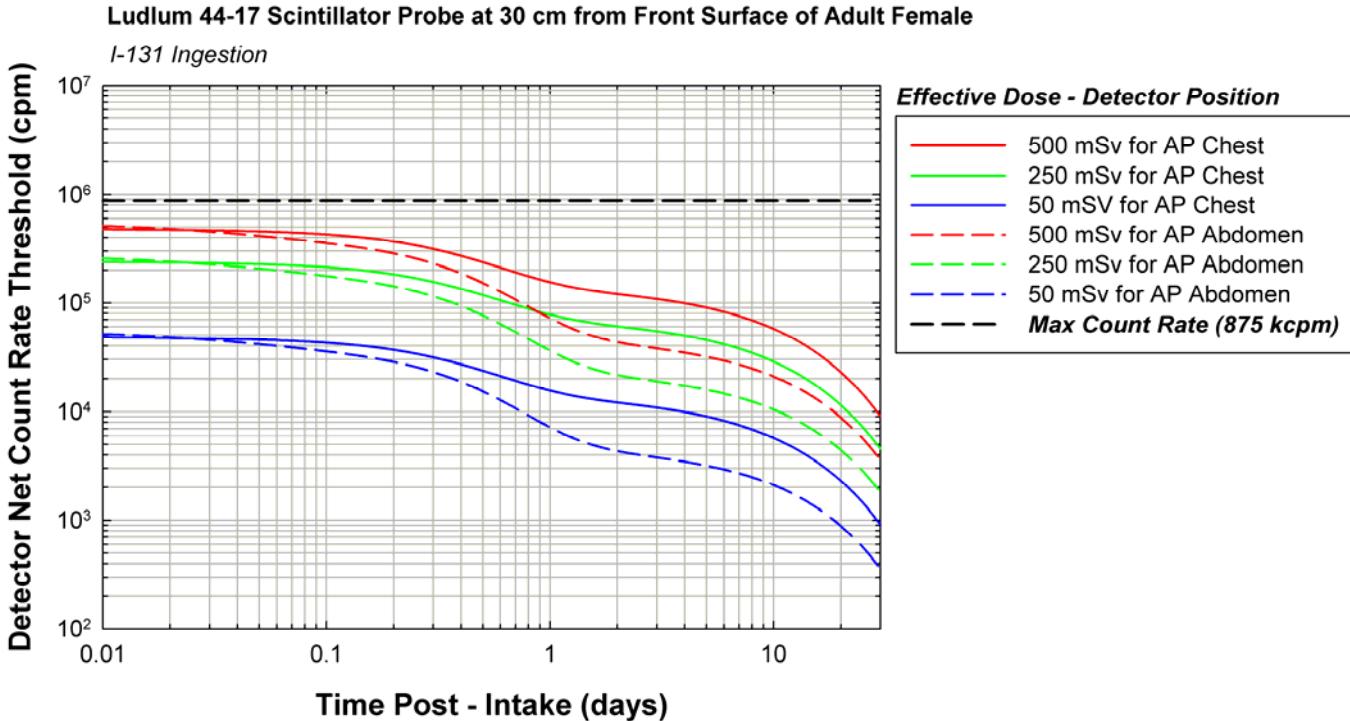
  

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	2.34E+03	2.34E+03	1.66E+03	1.66E+03	1.17E+04	1.17E+04	8.28E+03	8.28E+03	2.34E+04	2.34E+04	1.66E+04	1.66E+04		
	1	2.20E+03	2.20E+03	1.66E+03	1.66E+03	1.10E+04	1.10E+04	8.32E+03	8.32E+03	2.20E+04	2.20E+04	1.66E+04	1.66E+04		
	2	2.03E+03	2.03E+03	1.63E+03	1.63E+03	1.01E+04	1.01E+04	8.14E+03	8.14E+03	2.03E+04	2.03E+04	1.63E+04	1.63E+04		
	4	1.78E+03	1.78E+03	1.45E+03	1.45E+03	8.91E+03	8.91E+03	7.27E+03	7.27E+03	1.78E+04	1.78E+04	1.45E+04	1.45E+04		
	6	1.57E+03	1.57E+03	1.26E+03	1.26E+03	7.83E+03	7.83E+03	6.29E+03	6.29E+03	1.57E+04	1.57E+04	1.26E+04	1.26E+04		
	8	1.38E+03	1.38E+03	1.08E+03	1.08E+03	6.90E+03	6.90E+03	5.40E+03	5.40E+03	1.38E+04	1.38E+04	1.08E+04	1.08E+04		
	10	1.22E+03	1.22E+03	9.32E+02	9.32E+02	6.11E+03	6.11E+03	4.66E+03	4.66E+03	1.22E+04	1.22E+04	9.32E+03	9.32E+03		
	12	1.09E+03	1.09E+03	8.11E+02	8.11E+02	5.46E+03	5.46E+03	4.05E+03	4.05E+03	1.09E+04	1.09E+04	8.11E+03	8.11E+03		
	14	9.90E+02	9.90E+02	7.16E+02	7.16E+02	4.95E+03	4.95E+03	3.58E+03	3.58E+03	9.90E+03	9.90E+03	7.16E+03	7.16E+03		
	16	9.07E+02	9.07E+02	6.40E+02	6.40E+02	4.54E+03	4.54E+03	3.20E+03	3.20E+03	9.07E+03	9.07E+03	6.40E+03	6.40E+03		
	18	8.40E+02	8.40E+02	5.78E+02	5.78E+02	4.20E+03	4.20E+03	2.89E+03	2.89E+03	8.40E+03	8.40E+03	5.78E+03	5.78E+03		
	20	7.85E+02	7.85E+02	5.28E+02	5.28E+02	3.93E+03	3.93E+03	2.64E+03	2.64E+03	7.85E+03	7.85E+03	5.28E+03	5.28E+03		
1	7.04E+02	7.04E+02	4.55E+02	4.55E+02	3.52E+03	3.52E+03	2.28E+03	2.28E+03	7.04E+03	7.04E+03	4.55E+03	4.55E+03			
2	5.41E+02	5.41E+02	3.23E+02	3.23E+02	2.71E+03	2.71E+03	1.61E+03	1.61E+03	5.41E+03	5.41E+03	3.23E+03	3.23E+03			
3	4.87E+02	4.87E+02	2.89E+02	2.89E+02	2.43E+03	2.43E+03	1.45E+03	1.45E+03	4.87E+03	4.87E+03	2.89E+03	2.89E+03			
4	4.44E+02	4.44E+02	2.64E+02	2.64E+02	2.22E+03	2.22E+03	1.32E+03	1.32E+03	4.44E+03	4.44E+03	2.64E+03	2.64E+03			
5	4.06E+02	4.06E+02	2.42E+02	2.42E+02	2.03E+03	2.03E+03	1.21E+03	1.21E+03	4.06E+03	4.06E+03	2.42E+03	2.42E+03			
6	3.71E+02	3.71E+02	2.22E+02	2.22E+02	1.85E+03	1.85E+03	1.11E+03	1.11E+03	3.71E+03	3.71E+03	2.22E+03	2.22E+03			
7	3.39E+02	3.39E+02	2.03E+02	2.03E+02	1.70E+03	1.70E+03	1.02E+03	1.02E+03	3.39E+03	3.39E+03	2.03E+03	2.03E+03			
8	3.10E+02	3.10E+02	1.86E+02	1.86E+02	1.55E+03	1.55E+03	9.32E+02	9.32E+02	3.10E+03	3.10E+03	1.86E+03	1.86E+03			
9	2.83E+02	2.83E+02	1.71E+02	1.71E+02	1.42E+03	1.42E+03	8.53E+02	8.53E+02	2.83E+03	2.83E+03	1.71E+03	1.71E+03			
10	2.59E+02	2.59E+02	1.56E+02	1.56E+02	1.30E+03	1.30E+03	7.81E+02	7.81E+02	2.59E+03	2.59E+03	1.56E+03	1.56E+0			

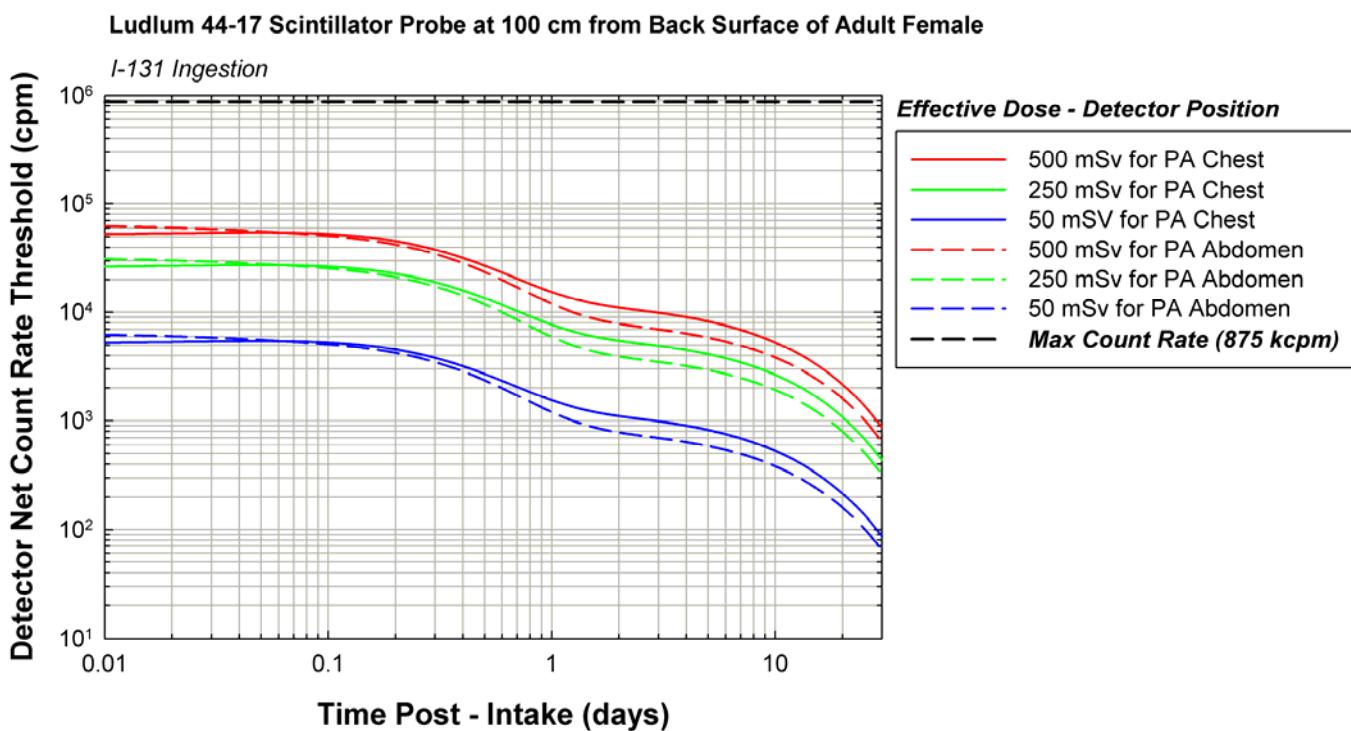
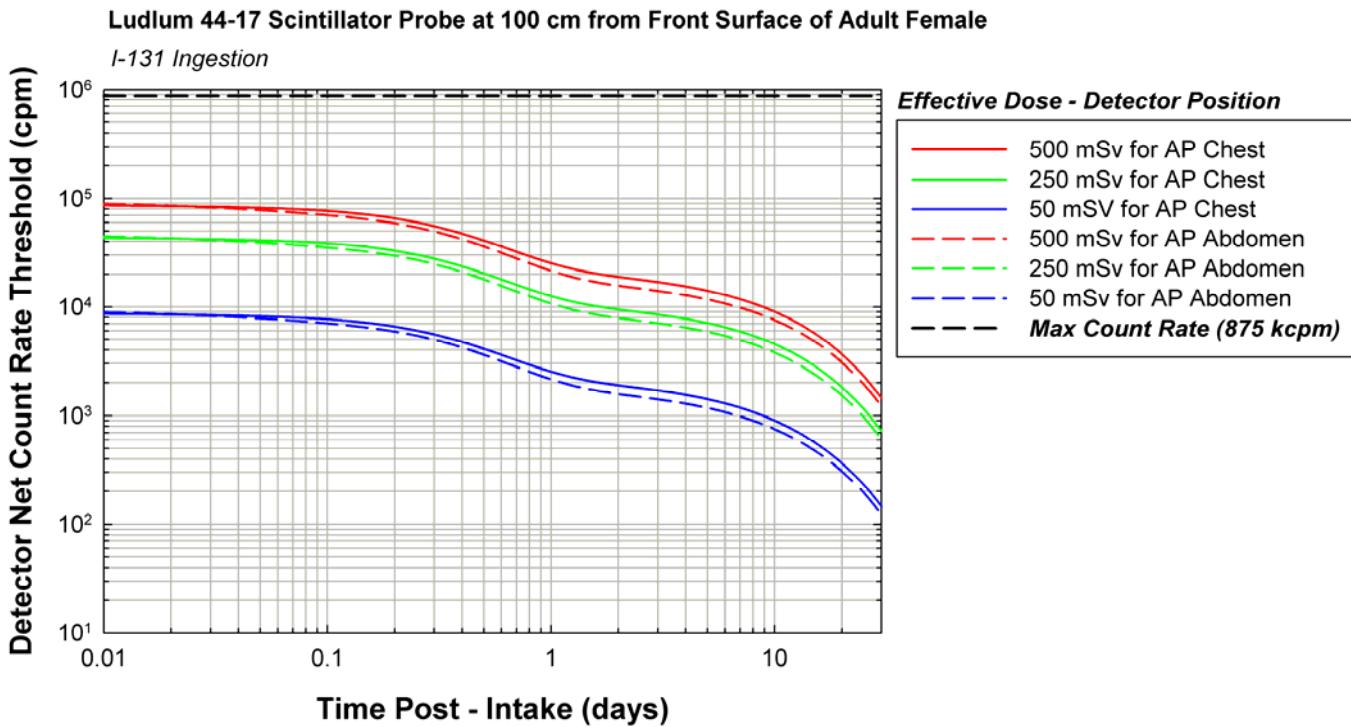
**Table D14 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iodine-131, Ingestion,  $f_A = 1.00$  Ludlum 44-17 Scintillator Probe**



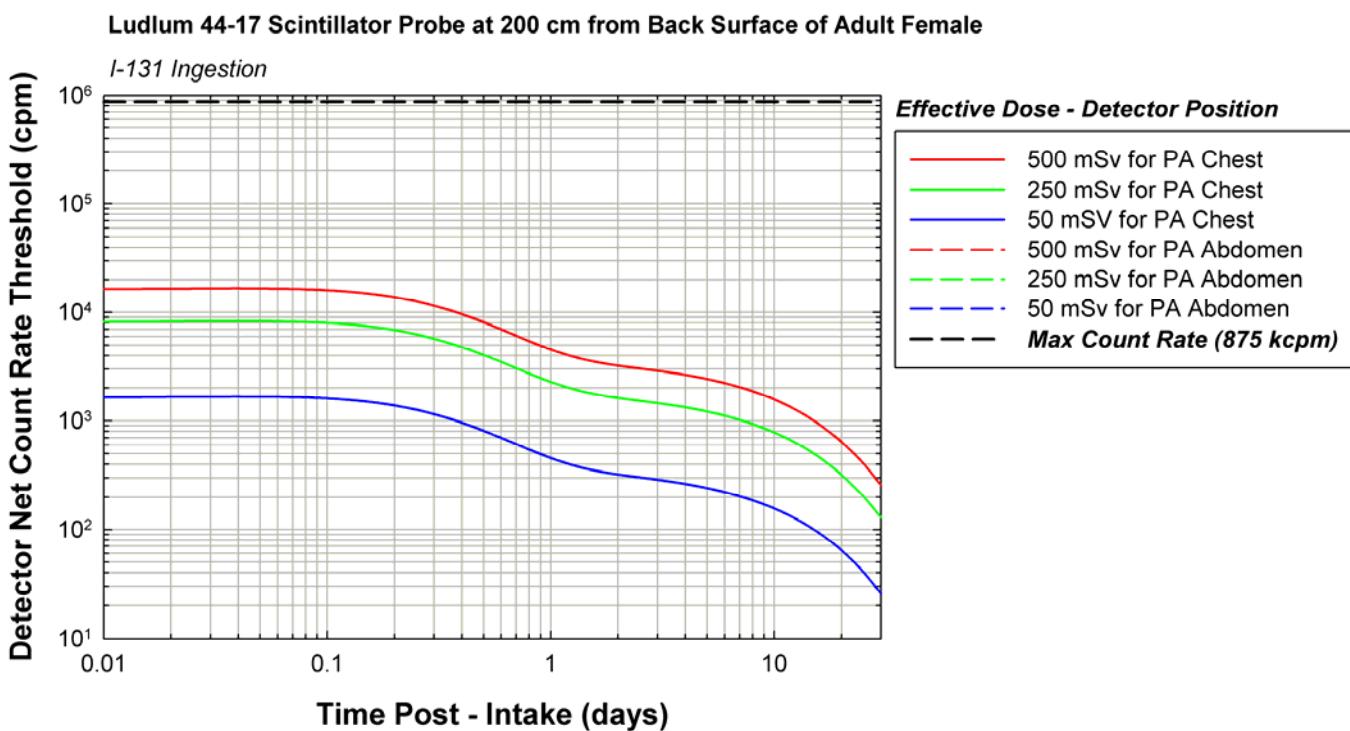
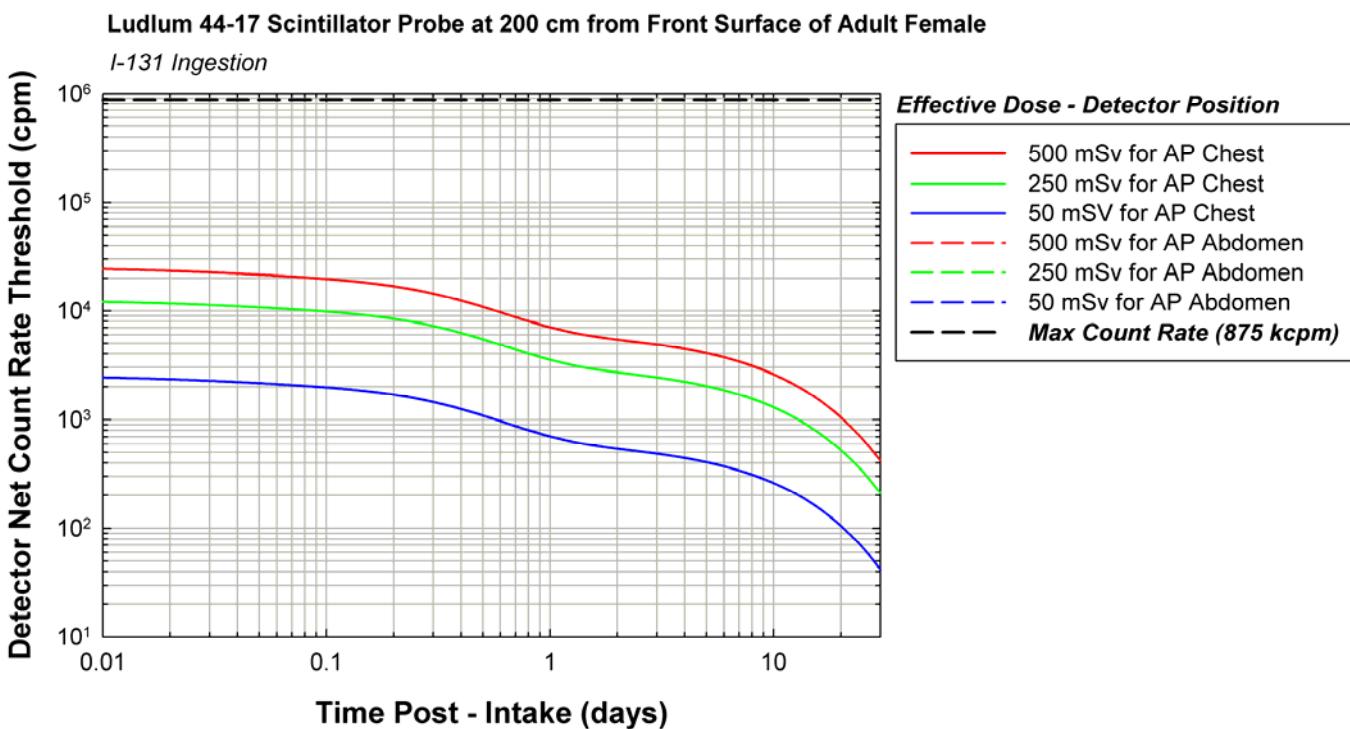
**Table D14 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iodine-131, Ingestion,  $f_A = 1.00$  Ludlum 44-17 Scintillator Probe**



**Table D14 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iodine-131, Ingestion,  $f_A = 1.00$  Ludlum 44-17 Scintillator Probe**



**Table D14 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iodine-131, Ingestion,  $f_A = 1.00$  **Ludlum 44-17 Scintillator Probe****



**Table D15 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iridium-192, Inhalation, 1-μm AMAD Aerosol, Type F, f<sub>A</sub> = 0.01 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		1.81E+06	1.31E+06	1.02E+06	8.64E+05	9.03E+06	6.56E+06	5.10E+06	4.32E+06	1.81E+07	1.31E+07	1.02E+07	8.64E+06		
1		1.69E+06	1.42E+06	9.46E+05	9.06E+05	8.47E+06	7.08E+06	4.73E+06	4.53E+06	1.69E+07	1.42E+07	9.46E+06	9.06E+06		
2		1.54E+06	1.51E+06	8.55E+05	9.07E+05	7.68E+06	7.54E+06	4.27E+06	4.54E+06	1.54E+07	1.51E+07	8.55E+06	9.07E+06		
4		1.32E+06	1.61E+06	7.33E+05	8.64E+05	6.59E+06	8.07E+06	3.66E+06	4.32E+06	1.32E+07	1.61E+07	7.33E+06	8.64E+06		
6		1.16E+06	1.68E+06	6.44E+05	8.26E+05	5.80E+06	8.38E+06	3.22E+06	4.13E+06	1.16E+07	1.68E+07	6.44E+06	8.26E+06		
8		1.03E+06	1.71E+06	5.75E+05	7.99E+05	5.16E+06	8.57E+06	2.87E+06	3.99E+06	1.03E+07	1.71E+07	5.75E+06	7.99E+06		
10		9.29E+05	1.73E+06	5.20E+05	7.80E+05	4.65E+06	8.67E+06	2.60E+06	3.90E+06	9.29E+06	1.73E+07	5.20E+06	7.80E+06		
12		8.44E+05	1.74E+06	4.75E+05	7.65E+05	4.22E+06	8.70E+06	2.38E+06	3.82E+06	8.44E+06	1.74E+07	4.75E+06	7.65E+06		
14		7.75E+05	1.73E+06	4.40E+05	7.52E+05	3.87E+06	8.65E+06	2.20E+06	3.76E+06	7.75E+06	1.73E+07	4.40E+06	7.52E+06		
16		7.17E+05	1.71E+06	4.11E+05	7.40E+05	3.58E+06	8.56E+06	2.06E+06	3.70E+06	7.17E+06	1.71E+07	4.11E+06	7.40E+06		
18		6.67E+05	1.69E+06	3.87E+05	7.28E+05	3.34E+06	8.44E+06	1.94E+06	3.64E+06	6.67E+06	1.69E+07	3.87E+06	7.28E+06		
20		6.25E+05	1.66E+06	3.67E+05	7.17E+05	3.13E+06	8.29E+06	1.84E+06	3.58E+06	6.25E+06	1.66E+07	3.67E+06	7.17E+06		
1		5.58E+05	1.59E+06	3.36E+05	6.93E+05	2.79E+06	7.93E+06	1.68E+06	3.47E+06	5.58E+06	1.59E+07	3.36E+06	6.93E+06		
2		3.75E+05	1.13E+06	2.58E+05	5.67E+05	1.88E+06	5.63E+06	1.29E+06	2.84E+06	3.75E+06	1.13E+07	2.58E+06	5.67E+06		
3		3.13E+05	8.55E+05	2.31E+05	4.95E+05	1.56E+06	4.27E+06	1.16E+06	2.47E+06	3.13E+06	8.55E+06	2.31E+06	4.95E+06		
4		2.85E+05	7.29E+05	2.18E+05	4.57E+05	1.42E+06	3.65E+06	1.09E+06	2.29E+06	2.85E+06	7.29E+06	2.18E+06	4.57E+06		
5		2.70E+05	6.70E+05	2.10E+05	4.36E+05	1.35E+06	3.35E+06	1.05E+06	2.18E+06	2.70E+06	6.70E+06	2.10E+06	4.36E+06		
6		2.61E+05	6.38E+05	2.04E+05	4.22E+05	1.30E+06	3.19E+06	1.02E+06	2.11E+06	2.61E+06	6.38E+06	2.04E+06	4.22E+06		
7		2.54E+05	6.16E+05	1.98E+05	4.10E+05	1.27E+06	3.08E+06	9.92E+05	2.05E+06	2.54E+06	6.16E+06	1.98E+06	4.10E+06		
8		2.47E+05	5.99E+05	1.94E+05	4.00E+05	1.24E+06	3.00E+06	9.68E+05	2.00E+06	2.47E+06	5.99E+06	1.94E+06	4.00E+06		
9		2.42E+05	5.84E+05	1.89E+05	3.91E+05	1.21E+06	2.92E+06	9.47E+05	1.96E+06	2.42E+06	5.84E+06	1.89E+06	3.91E+06		
10		2.36E+05	5.71E+05	1.85E+05	3.83E+05	1.18E+06	2.85E+06	9.26E+05	1.91E+06	2.36E+06	5.71E+06	1.85E+06	3.83E+06		
15		2.16E+05	5.20E+05	1.69E+05	3.49E+05	1.08E+06	2.60E+06	8.47E+05	1.75E+06	2.16E+06	5.20E+06	1.69E+06	3.49E+06		
20		1.96E+05	4.68E+05	1.53E+05	3.16E+05	9.78E+05	2.34E+06	7.67E+05	1.58E+06	1.96E+06	4.68E+06	1.53E+06	3.16E+06		
25		1.81E+05	4.33E+05	1.42E+05	2.93E+05	9.07E+05	2.17E+06	7.12E+05	1.47E+06	1.81E+06	4.33E+06	1.42E+06	2.93E+06		
30		1.67E+05	3.99E+05	1.31E+05	2.70E+05	8.37E+05	1.99E+06	6.56E+05	1.35E+06	1.67E+06	3.99E+06	1.31E+06	2.70E+06		

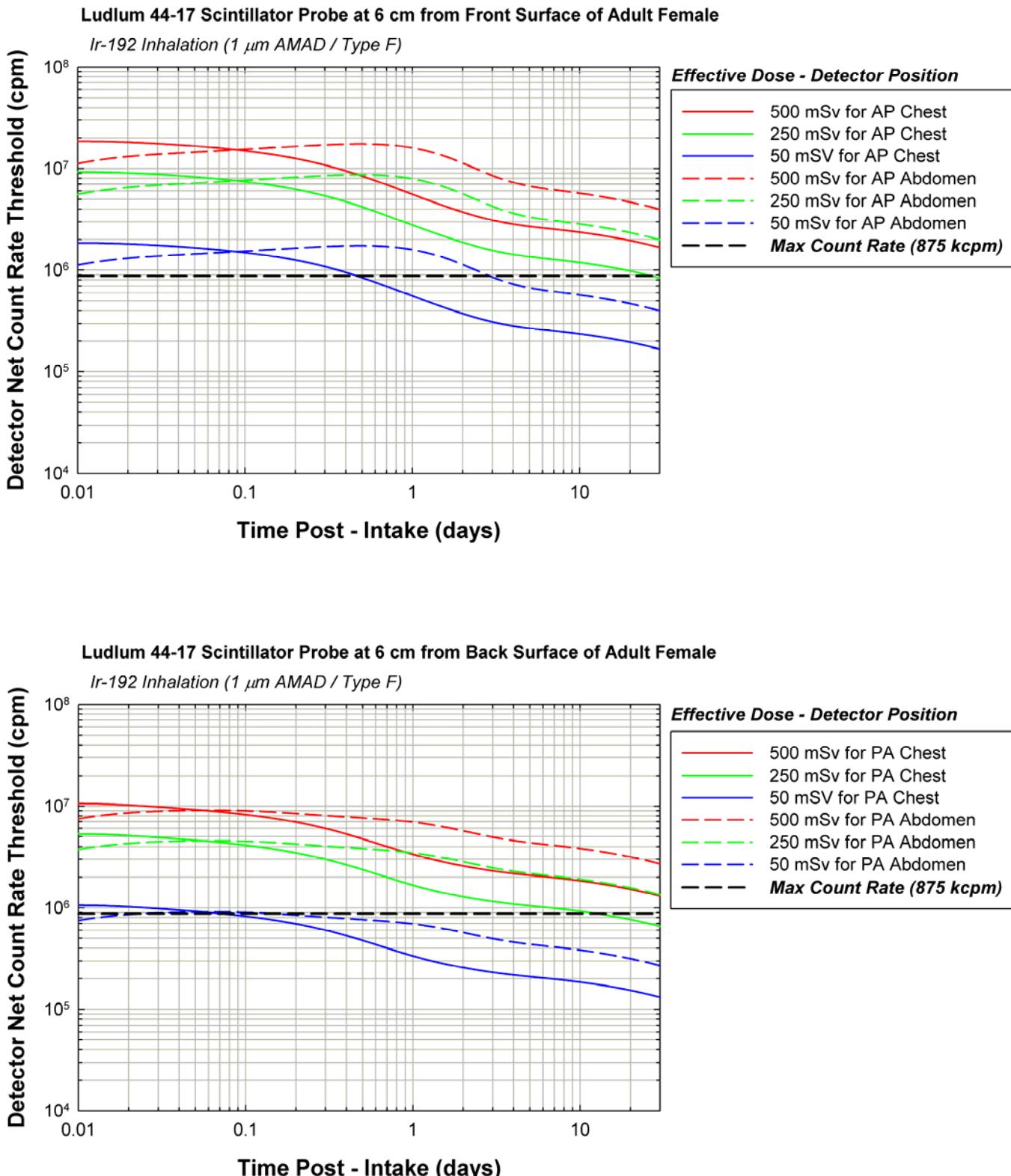
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		5.98E+05	4.67E+05	3.22E+05	3.22E+05	2.99E+06	2.34E+06	1.61E+06	1.61E+06	5.98E+06	4.67E+06	3.22E+06	3.22E+06		
1		5.75E+05	4.78E+05	3.11E+05	3.25E+05	2.88E+06	2.39E+06	1.55E+06	1.62E+06	5.75E+06	4.78E+06	3.11E+06	3.25E+06		
2		5.42E+05	4.80E+05	2.93E+05	3.17E+05	2.71E+06	2.40E+06	1.46E+06	1.58E+06	5.42E+06	4.80E+06	2.93E+06	3.17E+06		
4		5.01E+05	4.81E+05	2.66E+05	2.97E+05	2.50E+06	2.40E+06	1.33E+06	1.48E+06	5.01E+06	4.81E+06	2.66E+06	2.97E+06		
6		4.71E+05	4.78E+05	2.45E+05	2.80E+05	2.35E+06	2.39E+06	1.23E+06	1.40E+06	4.71E+06	4.78E+06	2.45E+06	2.80E+06		
8		4.45E+05	4.72E+05	2.30E+05	2.68E+05	2.23E+06	2.36E+06	1.15E+06	1.34E+06	4.45E+06	4.72E+06	2.30E+06	2.68E+06		
10		4.23E+05	4.65E+05	2.17E+05	2.58E+05	2.12E+06	2.32E+06	1.09E+06	1.29E+06	4.23E+06	4.65E+06	2.17E+06	2.58E+06		
12		4.04E+05	4.56E+05	2.07E+05	2.50E+05	2.02E+06	2.28E+06	1.03E+06	1.25E+06	4.04E+06	4.56E+06	2.07E+06	2.50E+06		
14		3.87E+05	4.46E+05	1.98E+05	2.44E+05	1.93E+06	2.23E+06	9.92E+05	1.22E+06	3.87E+06	4.46E+06	1.98E+06	2.44E+06		
16		3.71E+05	4.36E+05	1.91E+05	2.38E+05	1.85E+06	2.18E+06	9.56E+05	1.19E+06	3.71E+06	4.36E+06	1.91E+06	2.38E+06		
18		3.56E+05	4.25E+05	1.85E+05	2.32E+05	1.78E+06	2.13E+06	9.24E+05	1.16E+06	3.56E+06	4.25E+06	1.85E+06	2.32E+06		
20		3.43E+05	4.14E+05	1.79E+05	2.27E+05	1.72E+06	2.07E+06	8.96E+05	1.13E+06	3.43E+06	4.14E+06	1.79E+06	2.27E+06		
1		3.19E+05	3.92E+05	1.70E+05	2.17E+05	1.60E+06	1.96E+06	8.49E+05	1.09E+06	3.19E+06	3.92E+06	1.70E+06	2.17E+06		
2		2.27E+05	2.82E+05	1.37E+05	1.75E+05	1.14E+06	1.41E+06	6.86E+05	8.75E+05	2.27E+06	2.82E+06	1.37E+06	1.75E+06		
3		1.85E+05	2.25E+05	1.22E+05	1.53E+05	9.25E+05	1.12E+06	6.12E+05	7.64E+05	1.85E+06	2.25E+06	1.22E+06	1.53E+06		
4		1.66E+05	1.98E+05	1.15E+05	1.41E+05	8.29E+05	9.90E+05	5.74E+05	7.07E+05	1.66E+06	1.98E+06	1.15E+06	1.41E+06		
5		1.56E+05	1.85E+05	1.10E+05	1.35E+05	7.80E+05	9.25E+05	5.51E+05	6.75E+05	1.56E+06	1.85E+06	1.10E+06	1.35E+06		
6		1.50E+05	1.77E+05	1.07E+05	1.31E+05	7.50E+05	8.86E+05	5.34E+05	6.53E+05	1.50E+06	1.77E+06	1.07E+06	1.31E+06		
7		1.46E+05	1.72E+05	1.04E+05	1.27E+05	7.28E+05	8.59E+05	5.20E+05	6.35E+05	1.46E+06	1.72E+06	1.04E+06	1.27E+06		
8		1.42E+05	1.67E+05	1.02E+05	1.24E+05	7.10E+05	8.37E+05	5.08E+05	6.20E+05	1.42E+06	1.67E+06	1.02E+06	1.24E+06		
9		1.39E+05	1.63E+05	9.92E+04	1.21E+05	6.93E+05	8.17E+05	4.96E+05	6.06E+05	1.39E+06	1.63E+06	9.92E+05	1.21E+06		
10		1.36E+05	1.60E+05</												

**Table D15 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 1-μm AMAD Aerosol, Type F, f<sub>A</sub> = 0.01 Ludlum 44-17 Scintillator Probe**

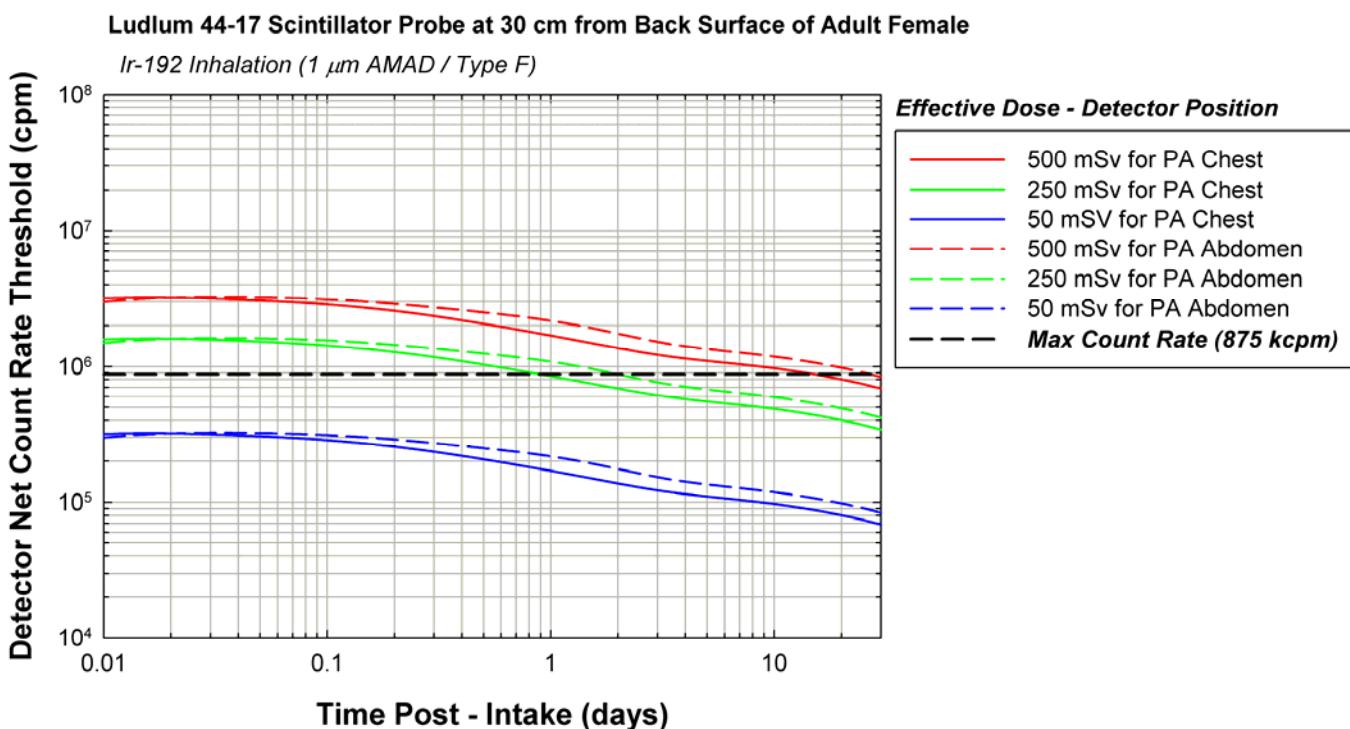
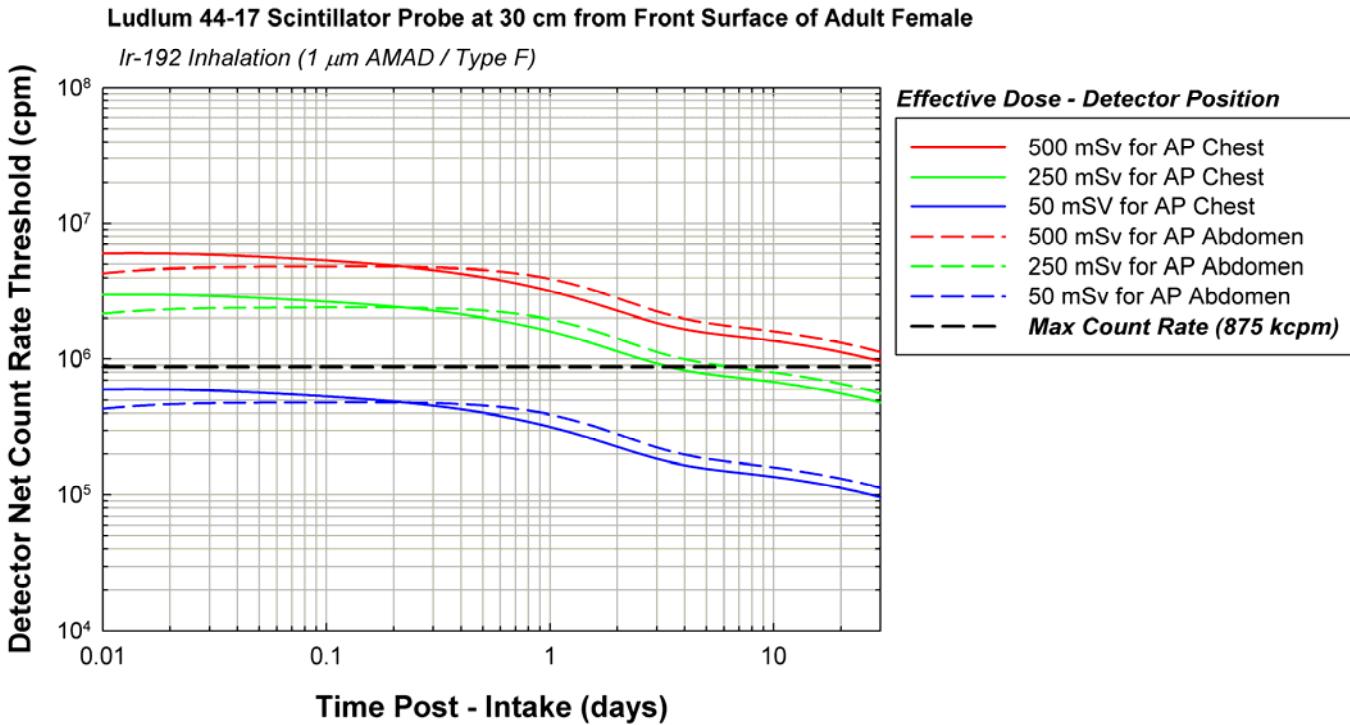
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	1.05E+05	9.39E+04	6.33E+04	6.52E+04	5.27E+05	4.69E+05	3.17E+05	3.26E+05	1.05E+06	9.39E+05	6.33E+05	6.52E+05		
	1	1.04E+05	9.47E+04	6.20E+04	6.50E+04	5.22E+05	4.73E+05	3.10E+05	3.25E+05	1.04E+06	9.47E+05	6.20E+05	6.50E+05		
	2	1.02E+05	9.40E+04	5.96E+04	6.31E+04	5.09E+05	4.70E+05	2.98E+05	3.16E+05	1.02E+06	9.40E+05	5.96E+05	6.31E+05		
	4	9.75E+04	9.17E+04	5.58E+04	5.89E+04	4.88E+05	4.58E+05	2.79E+05	2.95E+05	9.75E+05	9.17E+05	5.58E+05	5.89E+05		
	6	9.37E+04	8.91E+04	5.28E+04	5.54E+04	4.68E+05	4.45E+05	2.64E+05	2.77E+05	9.37E+05	8.91E+05	5.28E+05	5.54E+05		
	8	9.01E+04	8.65E+04	5.04E+04	5.26E+04	4.50E+05	4.33E+05	2.52E+05	2.63E+05	9.01E+05	8.65E+05	5.04E+05	5.26E+05		
	10	8.67E+04	8.40E+04	4.85E+04	5.04E+04	4.33E+05	4.20E+05	2.42E+05	2.52E+05	8.67E+05	8.40E+05	4.85E+05	5.04E+05		
	12	8.34E+04	8.15E+04	4.68E+04	4.85E+04	4.17E+05	4.07E+05	2.34E+05	2.43E+05	8.34E+05	8.15E+05	4.68E+05	4.85E+05		
	14	8.04E+04	7.90E+04	4.54E+04	4.70E+04	4.02E+05	3.95E+05	2.27E+05	2.35E+05	8.04E+05	7.90E+05	4.54E+05	4.70E+05		
	16	7.75E+04	7.67E+04	4.41E+04	4.56E+04	3.88E+05	3.83E+05	2.20E+05	2.28E+05	7.75E+05	7.67E+05	4.41E+05	4.56E+05		
	18	7.48E+04	7.44E+04	4.29E+04	4.43E+04	3.74E+05	3.72E+05	2.15E+05	2.22E+05	7.48E+05	7.44E+05	4.29E+05	4.43E+05		
	20	7.22E+04	7.21E+04	4.19E+04	4.32E+04	3.61E+05	3.61E+05	2.09E+05	2.16E+05	7.22E+05	7.21E+05	4.19E+05	4.32E+05		
1	6.73E+04	6.79E+04	3.99E+04	4.12E+04	3.37E+05	3.39E+05	2.00E+05	2.06E+05	6.73E+05	6.79E+05	3.99E+05	4.12E+05			
2	4.72E+04	4.93E+04	3.23E+04	3.32E+04	2.36E+05	2.46E+05	1.62E+05	1.66E+05	4.72E+05	4.93E+05	3.23E+05	3.32E+05			
3	3.78E+04	4.02E+04	2.86E+04	2.93E+04	1.89E+05	2.01E+05	1.43E+05	1.46E+05	3.78E+05	4.02E+05	2.86E+05	2.93E+05			
4	3.35E+04	3.60E+04	2.67E+04	2.73E+04	1.68E+05	1.80E+05	1.34E+05	1.36E+05	3.35E+05	3.60E+05	2.67E+05	2.73E+05			
5	3.14E+04	3.38E+04	2.56E+04	2.61E+04	1.57E+05	1.69E+05	1.28E+05	1.31E+05	3.14E+05	3.38E+05	2.56E+05	2.61E+05			
6	3.02E+04	3.25E+04	2.48E+04	2.53E+04	1.51E+05	1.63E+05	1.24E+05	1.27E+05	3.02E+05	3.25E+05	2.48E+05	2.53E+05			
7	2.92E+04	3.16E+04	2.42E+04	2.46E+04	1.46E+05	1.58E+05	1.21E+05	1.23E+05	2.92E+05	3.16E+05	2.42E+05	2.46E+05			
8	2.85E+04	3.08E+04	2.36E+04	2.41E+04	1.42E+05	1.54E+05	1.18E+05	1.20E+05	2.85E+05	3.08E+05	2.36E+05	2.41E+05			
9	2.78E+04	3.00E+04	2.31E+04	2.35E+04	1.39E+05	1.50E+05	1.15E+05	1.18E+05	2.78E+05	3.00E+05	2.31E+05	2.35E+05			
10	2.72E+04	2.94E+04	2.26E+04	2.30E+04	1.36E+05	1.47E+05	1.13E+05	1.15E+05	2.72E+05	2.94E+05	2.26E+05	2.30E+05			
15	2.45E+04	2.65E+04	2.04E+04	2.08E+04	1.23E+05	1.33E+05	1.02E+05	1.04E+05	2.45E+05	2.65E+05	2.04E+05	2.08E+05			
20	2.24E+04	2.42E+04	1.87E+04	1.90E+04	1.12E+05	1.21E+05	9.33E+04	9.50E+04	2.24E+05	2.42E+05	1.87E+05	1.90E+05			
25	2.08E+04	2.24E+04	1.73E+04	1.76E+04	1.04E+05	1.12E+05	8.66E+04	8.82E+04	2.08E+05	2.24E+05	1.73E+05	1.76E+05			
30	1.91E+04	2.07E+04	1.60E+04	1.63E+04	9.57E+04	1.03E+05	7.98E+04	8.13E+04	1.91E+05	2.07E+05	1.60E+05	1.63E+05			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	2.79E+04	2.79E+04	1.89E+04	1.89E+04	1.40E+05	1.40E+05	9.46E+04	9.46E+04	2.79E+05	2.79E+05	1.89E+05	1.89E+05		
	1	2.77E+04	2.77E+04	1.87E+04	1.87E+04	1.39E+05	1.39E+05	9.37E+04	9.37E+04	2.77E+05	2.77E+05	1.87E+05	1.87E+05		
	2	2.73E+04	2.73E+04	1.81E+04	1.81E+04	1.36E+05	1.36E+05	9.06E+04	9.06E+04	2.73E+05	2.73E+05	1.81E+05	1.81E+05		
	4	2.65E+04	2.65E+04	1.70E+04	1.70E+04	1.33E+05	1.33E+05	8.48E+04	8.48E+04	2.65E+05	2.65E+05	1.70E+05	1.70E+05		
	6	2.58E+04	2.58E+04	1.60E+04	1.60E+04	1.29E+05	1.29E+05	8.02E+04	8.02E+04	2.58E+05	2.58E+05	1.60E+05	1.60E+05		
	8	2.52E+04	2.52E+04	1.53E+04	1.53E+04	1.26E+05	1.26E+05	7.65E+04	7.65E+04	2.52E+05	2.52E+05	1.53E+05	1.53E+05		
	10	2.45E+04	2.45E+04	1.47E+04	1.47E+04	1.22E+05	1.22E+05	7.34E+04	7.34E+04	2.45E+05	2.45E+05	1.47E+05	1.47E+05		
	12	2.38E+04	2.38E+04	1.42E+04	1.42E+04	1.19E+05	1.19E+05	7.08E+04	7.08E+04	2.38E+05	2.38E+05	1.42E+05	1.42E+05		
	14	2.32E+04	2.32E+04	1.37E+04	1.37E+04	1.16E+05	1.16E+05	6.86E+04	6.86E+04	2.32E+05	2.32E+05	1.37E+05	1.37E+05		
	16	2.25E+04	2.25E+04	1.33E+04	1.33E+04	1.13E+05	1.13E+05	6.66E+04	6.66E+04	2.25E+05	2.25E+05	1.33E+05	1.33E+05		
	18	2.19E+04	2.19E+04	1.29E+04	1.29E+04	1.09E+05	1.09E+05	6.47E+04	6.47E+04	2.19E+05	2.19E+05	1.29E+05	1.29E+05		
	20	2.13E+04	2.13E+04	1.26E+04	1.26E+04	1.06E+05	1.06E+05	6.30E+04	6.30E+04	2.13E+05	2.13E+05	1.26E+05	1.26E+05		
1	2.01E+04	2.01E+04	1.20E+04	1.20E+04	1.00E+05	1.00E+05	6.00E+04	6.00E+04	2.01E+05	2.01E+05	1.20E+05	1.20E+05			
2	1.48E+04	1.48E+04	9.57E+03	9.57E+03	7.38E+04	7.38E+04	4.78E+04	4.78E+04	1.48E+05	1.48E+05	9.57E+04	9.57E+04			
3	1.21E+04	1.21E+04	8.38E+03	8.38E+03	6.06E+04	6.06E+04	4.19E+04	4.19E+04	1.21E+05	1.21E+05	8.38E+04	8.38E+04			
4	1.09E+04	1.09E+04	7.79E+03	7.79E+03	5.45E+04	5.45E+04	3.90E+04	3.90E+04	1.09E+05	1.09E+05	7.79E+04	7.79E+04			
5	1.03E+04	1.03E+04	7.45E+03	7.45E+03	5.14E+04	5.14E+04	3.73E+04	3.73E+04	1.03E+05	1.03E+05	7.45E+04	7.45E+04			
6	9.89E+03	9.89E+03	7.22E+03	7.22E+03	4.95E+04	4.95E+04	3.61E+04	3.61E+04	9.89E+04	9.89E+04	7.22E+04	7.22E+04			
7	9.61E+03	9.61E+03	7.02E+03	7.02E+03	4.80E+04	4.80E+04	3.51E+04	3.51E+04	9.61E+04	9.61E+04	7.02E+04	7.02E+04			
8	9.36E+03	9.36E+03	6.85E+03	6.85E+03	4.68E+04	4.68E+04	3.43E+04	3.43E+04	9.36E+04	9.36E+04	6.85E+04	6.85E+04			
9	9.14E+03	9.14E+03	6.70E+03	6.70E+03	4.57E+04	4.57E+04	3.35E+04	3.35E+04	9.14E+04	9.14E+04	6.70E+04	6.70E+04			
10	8.94E+03	8.94E+03	6.55E+03	6.55E+03	4.47E+04	4.47E+04	3.28E+04	3.28E+04	8.94E+						

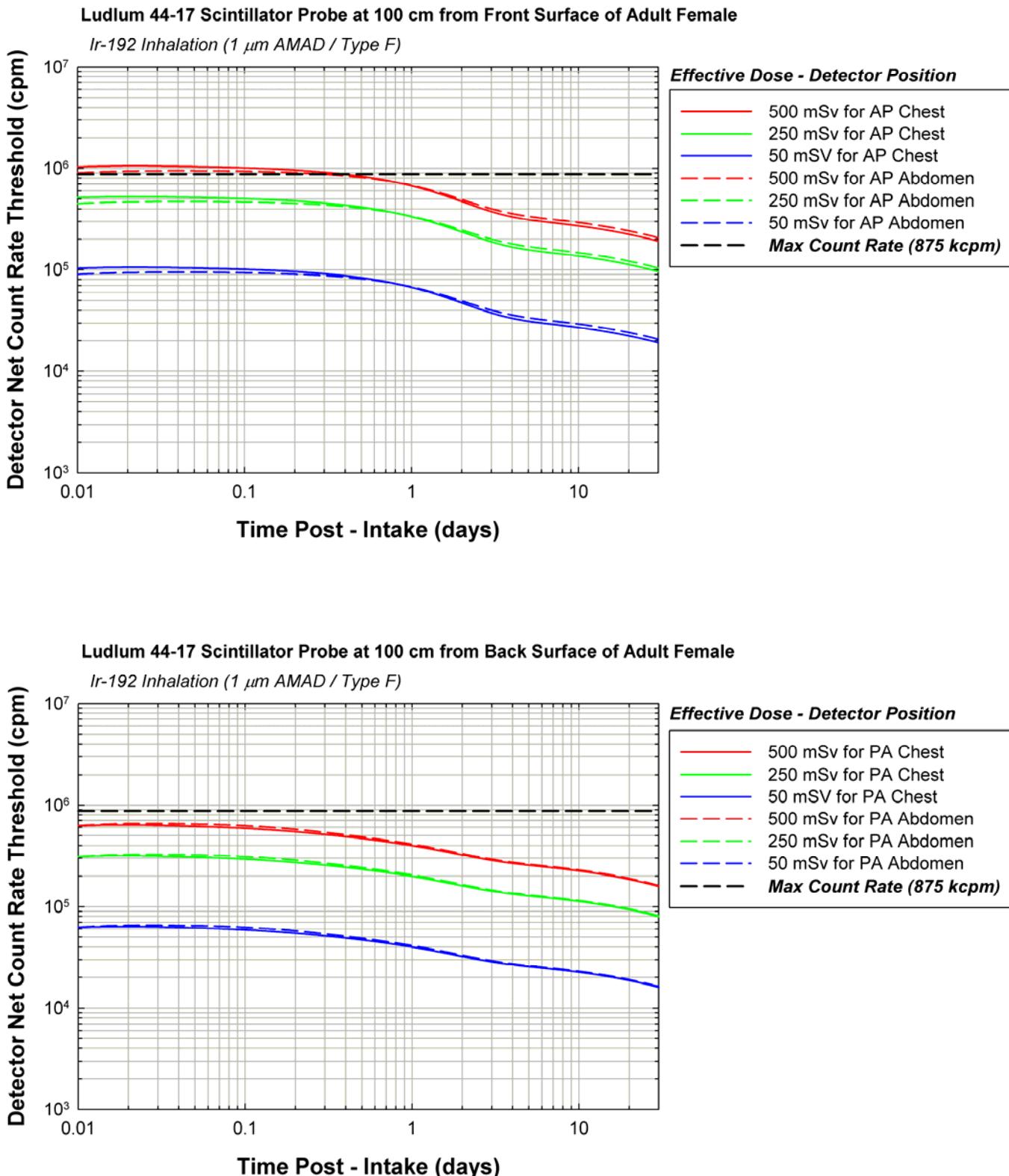
**Table D15 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 1- $\mu$ m AMAD Aerosol, Type F,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



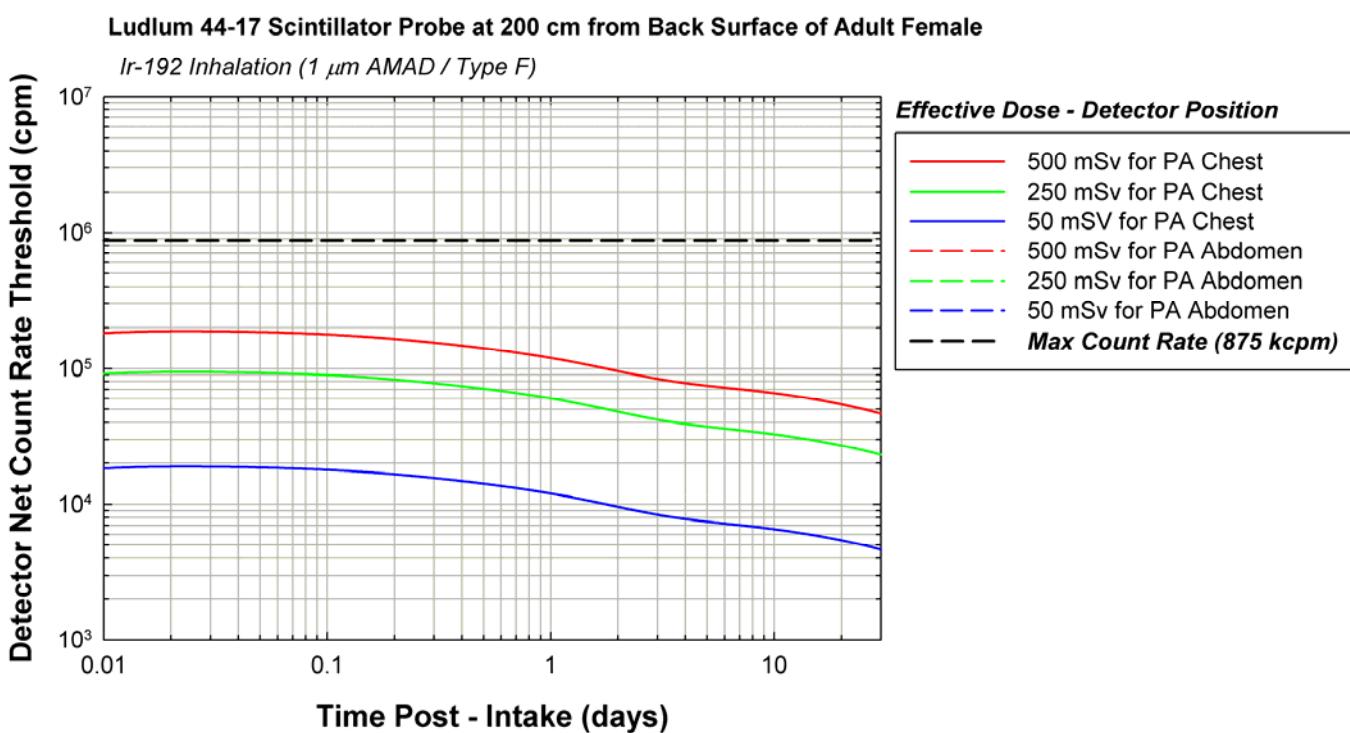
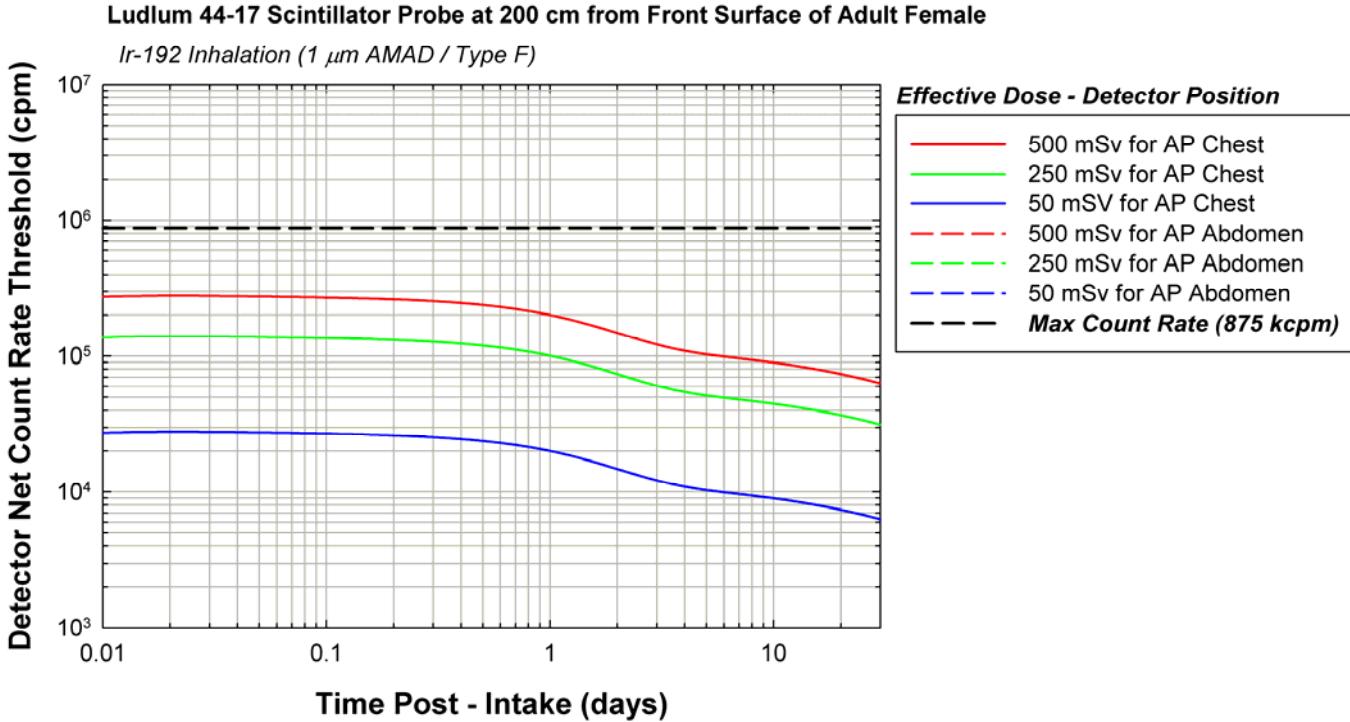
**Table D15 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 1- $\mu$ m AMAD Aerosol, Type F,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D15 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 1- $\mu$ m AMAD Aerosol, Type F,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D15 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 1- $\mu$ m AMAD Aerosol, Type F,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D16 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iridium-192, Inhalation, 1-μm AMAD Aerosol, Type M, f<sub>A</sub> = 0.01 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)																									
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED								Net Count Rate (cpm) for 250 mSv ED								Net Count Rate (cpm) for 500 mSv ED							
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen								
0.5		6.14E+05	4.51E+05	3.83E+05	3.05E+05	3.07E+06	2.26E+06	1.92E+06	1.53E+06	6.14E+06	4.51E+06	3.83E+06	3.05E+06												
1		5.78E+05	5.25E+05	3.70E+05	3.44E+05	2.89E+06	2.63E+06	1.85E+06	1.72E+06	5.78E+06	5.25E+06	3.70E+06	3.44E+06												
2		5.30E+05	5.83E+05	3.43E+05	3.49E+05	2.65E+06	2.92E+06	1.71E+06	1.75E+06	5.30E+06	5.83E+06	3.43E+06	3.49E+06												
4		4.89E+05	6.43E+05	3.17E+05	3.19E+05	2.44E+06	3.21E+06	1.58E+06	1.59E+06	4.89E+06	6.43E+06	3.17E+06	3.19E+06												
6		4.67E+05	6.77E+05	3.03E+05	2.91E+05	2.34E+06	3.38E+06	1.51E+06	1.45E+06	4.67E+06	6.77E+06	3.03E+06	2.91E+06												
8		4.52E+05	6.96E+05	2.94E+05	2.71E+05	2.26E+06	3.48E+06	1.47E+06	1.36E+06	4.52E+06	6.96E+06	2.94E+06	2.71E+06												
10		4.39E+05	7.06E+05	2.87E+05	2.57E+05	2.19E+06	3.53E+06	1.43E+06	1.29E+06	4.39E+06	7.06E+06	2.87E+06	2.57E+06												
12		4.27E+05	7.07E+05	2.81E+05	2.47E+05	2.14E+06	3.53E+06	1.40E+06	1.24E+06	4.27E+06	7.07E+06	2.81E+06	2.47E+06												
14		4.17E+05	7.00E+05	2.76E+05	2.39E+05	2.08E+06	3.50E+06	1.38E+06	1.19E+06	4.17E+06	7.00E+06	2.76E+06	2.39E+06												
16		4.07E+05	6.89E+05	2.71E+05	2.31E+05	2.04E+06	3.44E+06	1.36E+06	1.16E+06	4.07E+06	6.89E+06	2.71E+06	2.31E+06												
18		3.98E+05	6.73E+05	2.68E+05	2.24E+05	1.99E+06	3.36E+06	1.34E+06	1.12E+06	3.98E+06	6.73E+06	2.68E+06	2.24E+06												
20		3.90E+05	6.54E+05	2.64E+05	2.17E+05	1.95E+06	3.27E+06	1.32E+06	1.09E+06	3.90E+06	6.54E+06	2.64E+06	2.17E+06												
1		3.74E+05	6.11E+05	2.57E+05	2.04E+05	1.87E+06	3.05E+06	1.29E+06	1.02E+06	3.74E+06	6.11E+06	2.57E+06	2.04E+06												
2		3.11E+05	3.39E+05	2.30E+05	1.33E+05	1.56E+06	1.70E+06	1.15E+06	6.67E+05	3.11E+06	3.39E+06	2.30E+06	1.33E+06												
3		2.80E+05	1.85E+05	2.15E+05	9.54E+04	1.40E+06	9.26E+05	1.07E+06	4.77E+05	2.80E+06	1.85E+06	2.15E+06	9.54E+05												
4		2.65E+05	1.19E+05	2.06E+05	7.87E+04	1.32E+06	5.94E+05	1.03E+06	3.94E+05	2.65E+06	1.19E+06	2.06E+06	7.87E+05												
5		2.55E+05	9.21E+04	2.00E+05	7.15E+04	1.28E+06	4.60E+05	1.00E+06	3.57E+05	2.55E+06	9.21E+05	2.00E+06	7.15E+05												
6		2.48E+05	8.12E+04	1.95E+05	6.80E+04	1.24E+06	4.06E+05	9.75E+05	3.40E+05	2.48E+06	8.12E+05	1.95E+06	6.80E+05												
7		2.42E+05	7.64E+04	1.91E+05	6.60E+04	1.21E+06	3.82E+05	9.53E+05	3.30E+05	2.42E+06	7.64E+05	1.91E+06	6.60E+05												
8		2.37E+05	7.39E+04	1.86E+05	6.46E+04	1.18E+06	3.69E+05	9.32E+05	3.23E+05	2.37E+06	7.39E+05	1.86E+06	6.46E+05												
9		2.31E+05	7.22E+04	1.82E+05	6.33E+04	1.16E+06	3.61E+05	9.11E+05	3.17E+05	2.31E+06	7.22E+05	1.82E+06	6.33E+05												
10		2.27E+05	7.08E+04	1.78E+05	6.22E+04	1.13E+06	3.54E+05	8.92E+05	3.11E+05	2.27E+06	7.08E+05	1.78E+06	6.22E+05												
15		2.05E+05	6.58E+04	1.61E+05	5.76E+04	1.03E+06	3.29E+05	8.07E+05	2.88E+05	2.05E+06	6.58E+05	1.61E+06	5.76E+05												
20		1.84E+05	6.08E+04	1.45E+05	5.29E+04	9.18E+05	3.04E+05	7.23E+05	2.64E+05	1.84E+06	6.08E+05	1.45E+06	5.29E+05												
25		1.67E+05	5.69E+04	1.32E+05	4.93E+04	8.35E+05	2.85E+05	6.58E+05	2.46E+05	1.67E+06	5.69E+05	1.32E+06	4.93E+05												
30		1.51E+05	5.31E+04	1.19E+05	4.56E+04	7.53E+05	2.65E+05	5.93E+05	2.28E+05	1.51E+06	5.31E+05	1.19E+06	4.56E+05												

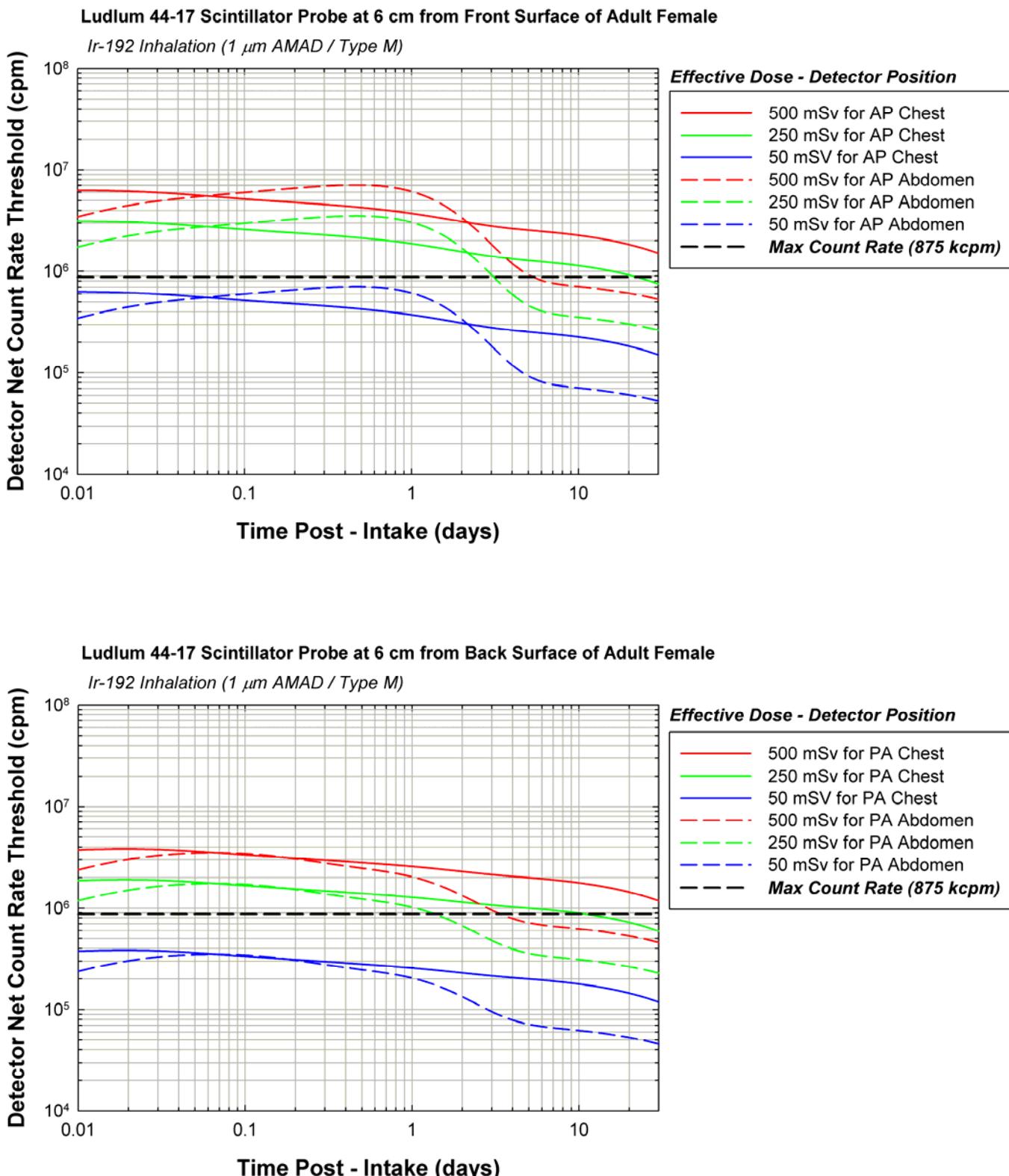
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)																									
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED								Net Count Rate (cpm) for 250 mSv ED								Net Count Rate (cpm) for 500 mSv ED							
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen								
0.5		2.15E+05	1.63E+05	1.16E+05	1.14E+05	1.08E+06	8.15E+05	5.82E+05	5.71E+05	2.15E+06	1.63E+06	1.16E+06	1.14E+06												
1		2.08E+05	1.73E+05	1.16E+05	1.21E+05	1.04E+06	8.66E+05	5.82E+05	6.07E+05	2.08E+06	1.73E+06	1.16E+06	1.21E+06												
2		1.95E+05	1.78E+05	1.10E+05	1.20E+05	9.74E+05	8.88E+05	5.52E+05	6.00E+05	1.95E+06	1.78E+06	1.10E+06	1.20E+06												
4		1.84E+05	1.83E+05	1.02E+05	1.12E+05	9.20E+05	9.13E+05	5.10E+05	5.58E+05	1.84E+06	1.83E+06	1.02E+06	1.12E+06												
6		1.78E+05	1.85E+05	9.65E+04	1.05E+05	8.92E+05	9.24E+05	4.83E+05	5.24E+05	1.78E+06	1.85E+06	9.65E+05	1.05E+06												
8		1.74E+05	1.85E+05	9.27E+04	9.99E+04	8.70E+05	9.24E+05	4.63E+05	5.00E+05	1.74E+06	1.85E+06	9.27E+05	9.99E+05												
10		1.70E+05	1.83E+05	8.97E+04	9.63E+04	8.48E+05	9.15E+05	4.49E+05	4.81E+05	1.70E+06	1.83E+06	8.97E+05	9.63E+05												
12		1.65E+05	1.80E+05	8.73E+04	9.34E+04	8.26E+05	9.01E+05	4.36E+05	4.67E+05	1.65E+06	1.80E+06	8.73E+05	9.34E+05												
14		1.61E+05	1.76E+05	8.52E+04	9.09E+04	8.04E+05	8.81E+05	4.26E+05	4.54E+05	1.61E+06	1.76E+06	8.52E+05	9.09E+05												
16		1.56E+05	1.72E+05	8.33E+04	8.85E+04	7.82E+05	8.58E+05	4.17E+05	4.43E+05	1.56E+06	1.72E+06	8.33E+05	8.85E+05												
18		1.52E+05	1.66E+05	8.16E+04	8.63E+04	7.59E+05	8.32E+05	4.08E+05	4.31E+05	1.52E+06	1.66E+06	8.16E+05	8.63E+05												
20		1.47E+05	1.61E+05	7.99E+04	8.40E+04	7.37E+05	8.05E+05	4.00E+05	4.20E+05	1.47E+06	1.61E+06	7.99E+05	8.40E+05												
1		1.39E+05	1.50E+05	7.67E+04	7.97E+04	6.93E+05	7.48E+05	3.84E+05	3.98E+05	1.39E+06	1.50E+06	7.67E+05	7.97E+05												
2		9.71E+04	8.95E+04	6.24E+04	5.77E+04	4.85E+05	4.47E+05	3.12E+05	2.89E+05	9.71E+05	8.95E+05	6.24E+05	5.77E+05												
3		7.61E+04	5.80E+04	5.50E+04	4.60E+04	3.81E+05	2.90E+05	2.75E+05	2.30E+05	7.61E+05	5.80E+05	5.50E+05	4.60E+05												
4		6.68E+04	4.46E+04	5.13E+04	4.06E+04	3.34E+05	2.23E+05	2.56E+05	2.03E+05	6.68E+05	4.46E+05	5.13E+05	4.06E+05												
5		6.24E+04	3.89E+04	4.92E+04	3.81E+04	3.12E+05	1.95E+05	2.46E+05	1.91E+05	6.24E+05	3.89E+05	4.92E+05	3.81E+05												
6		6.00E+04	3.64E+04	4.78E+04	3.67E+04	3.00E+05	1.82E+05	2.39E+05	1.84E+05	6.00E+05	3.64E+05	4.78E+05	3.67E+05												
7		5.84E+04	3.50E+04	4.67E+04	3.57E+04	2.92E+05	1.75E+05	2.33E+05	1.79E+05	5.84E+05	3.50E+05	4.67E+05	3.57E+05												
8		5.70E+04	3.41E+04	4.57E+04	3.50E+04	2.85E+05	1.71E+05	2.28E+05	1.75E+05	5.70E+05	3.41E+05	4.57E+05	3.50E+05												
9		5.58E+04	3.34E+04	4.47E+04	3.42E+04	2.79E+05	1.67E+05	2.24E+05	1.71E+05	5.58E+05	3.34E+05	4.47E+05	3.42E+05												
10		5.46E+04	3.27E+04	4.38E+04	3.36E+04	2																			

**Table D16 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iridium-192, Inhalation, 1-μm AMAD Aerosol, Type M, f<sub>A</sub> = 0.01 Ludlum 44-17 Scintillator Probe**

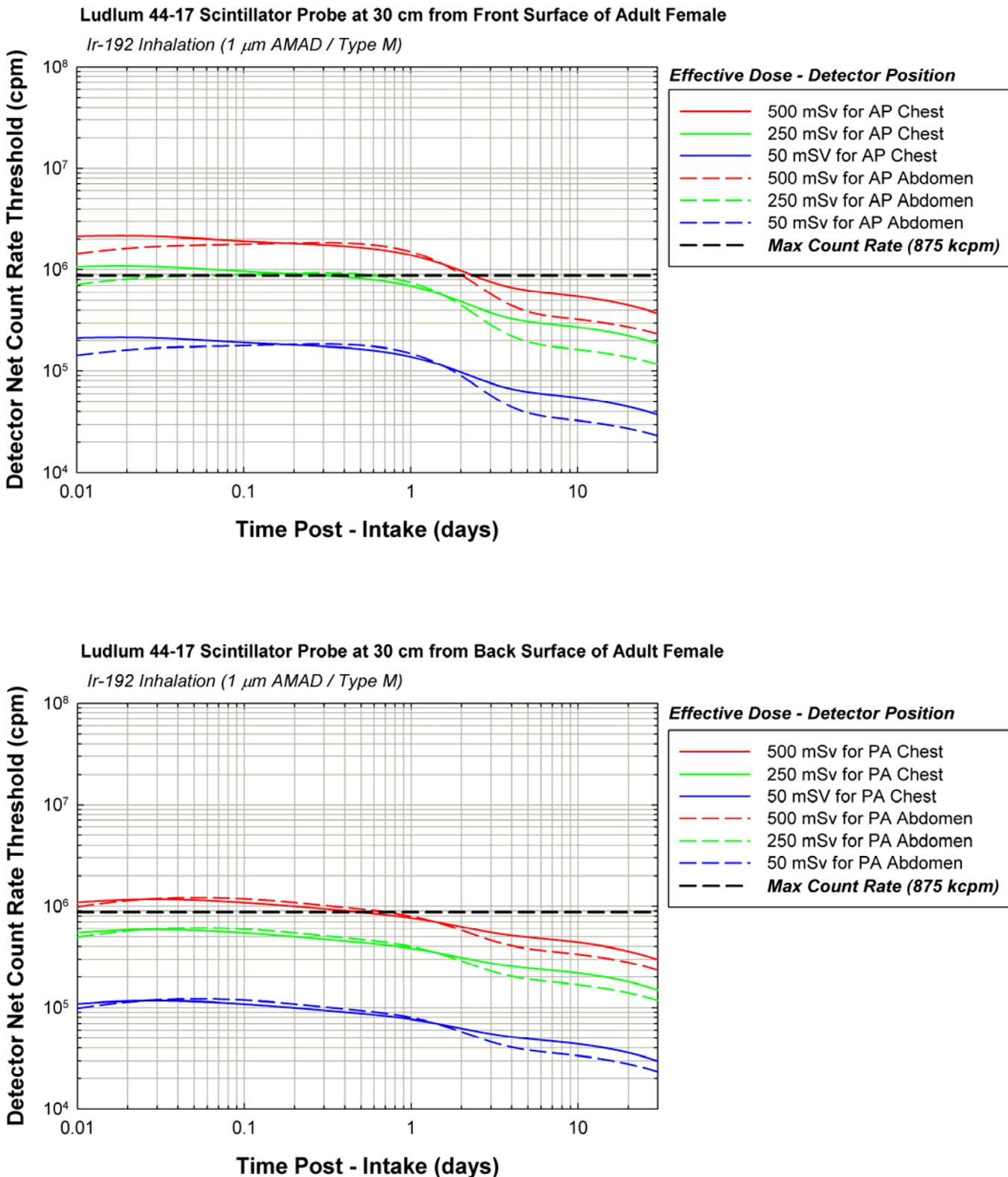
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		3.77E+04	3.31E+04	2.37E+04	2.36E+04	1.88E+05	1.65E+05	1.19E+05	1.18E+05	3.77E+05	3.31E+05	2.37E+05	2.36E+05		
1		3.79E+04	3.42E+04	2.39E+04	2.46E+04	1.90E+05	1.71E+05	1.20E+05	1.23E+05	3.79E+05	3.42E+05	2.39E+05	2.46E+05		
2		3.74E+04	3.46E+04	2.30E+04	2.43E+04	1.87E+05	1.73E+05	1.15E+05	1.22E+05	3.74E+05	3.46E+05	2.30E+05	2.43E+05		
4		3.68E+04	3.46E+04	2.13E+04	2.27E+04	1.84E+05	1.73E+05	1.07E+05	1.14E+05	3.68E+05	3.46E+05	2.13E+05	2.27E+05		
6		3.62E+04	3.42E+04	2.02E+04	2.14E+04	1.81E+05	1.71E+05	1.01E+05	1.07E+05	3.62E+05	3.42E+05	2.02E+05	2.14E+05		
8		3.55E+04	3.37E+04	1.94E+04	2.04E+04	1.78E+05	1.68E+05	9.69E+04	1.02E+05	3.55E+05	3.37E+05	1.94E+05	2.04E+05		
10		3.47E+04	3.30E+04	1.87E+04	1.96E+04	1.74E+05	1.65E+05	9.35E+04	9.80E+04	3.47E+05	3.30E+05	1.87E+05	1.96E+05		
12		3.38E+04	3.22E+04	1.81E+04	1.90E+04	1.69E+05	1.61E+05	9.06E+04	9.48E+04	3.38E+05	3.22E+05	1.81E+05	1.90E+05		
14		3.28E+04	3.13E+04	1.76E+04	1.84E+04	1.64E+05	1.56E+05	8.80E+04	9.21E+04	3.28E+05	3.13E+05	1.76E+05	1.84E+05		
16		3.18E+04	3.03E+04	1.71E+04	1.79E+04	1.59E+05	1.52E+05	8.56E+04	8.95E+04	3.18E+05	3.03E+05	1.71E+05	1.79E+05		
18		3.08E+04	2.94E+04	1.67E+04	1.74E+04	1.54E+05	1.47E+05	8.33E+04	8.71E+04	3.08E+05	2.94E+05	1.67E+05	1.74E+05		
20		2.97E+04	2.84E+04	1.62E+04	1.70E+04	1.49E+05	1.42E+05	8.12E+04	8.48E+04	2.97E+05	2.84E+05	1.62E+05	1.70E+05		
1		2.76E+04	2.64E+04	1.54E+04	1.61E+04	1.38E+05	1.32E+05	7.70E+04	8.05E+04	2.76E+05	2.64E+05	1.54E+05	1.61E+05		
2		1.78E+04	1.69E+04	1.17E+04	1.22E+04	8.91E+04	8.44E+04	5.85E+04	6.08E+04	1.78E+05	1.69E+05	1.17E+05	1.22E+05		
3		1.30E+04	1.21E+04	9.85E+03	1.02E+04	6.49E+04	6.06E+04	4.92E+04	5.08E+04	1.30E+05	1.21E+05	9.85E+04	1.02E+05		
4		1.09E+04	1.01E+04	8.99E+03	9.24E+03	5.44E+04	5.03E+04	4.50E+04	4.62E+04	1.09E+05	1.01E+05	8.99E+04	9.24E+04		
5		9.96E+03	9.17E+03	8.56E+03	8.77E+03	4.98E+04	4.58E+04	4.28E+04	4.39E+04	9.96E+04	9.17E+04	8.56E+04	8.77E+04		
6		9.50E+03	8.72E+03	8.29E+03	8.49E+03	4.75E+04	4.36E+04	4.14E+04	4.25E+04	9.50E+04	8.72E+04	8.29E+04	8.49E+04		
7		9.21E+03	8.45E+03	8.09E+03	8.28E+03	4.60E+04	4.23E+04	4.04E+04	4.14E+04	9.21E+04	8.45E+04	8.09E+04	8.28E+04		
8		8.99E+03	8.25E+03	7.91E+03	8.10E+03	4.49E+04	4.13E+04	3.96E+04	4.05E+04	8.99E+04	8.25E+04	7.91E+04	8.10E+04		
9		8.80E+03	8.08E+03	7.75E+03	7.93E+03	4.40E+04	4.04E+04	3.87E+04	3.97E+04	8.80E+04	8.08E+04	7.75E+04	7.93E+04		
10		8.62E+03	7.92E+03	7.59E+03	7.78E+03	4.31E+04	3.96E+04	3.80E+04	3.89E+04	8.62E+04	7.92E+04	7.59E+04	7.78E+04		
15		7.82E+03	7.20E+03	6.89E+03	7.05E+03	3.91E+04	3.60E+04	3.44E+04	3.53E+04	7.82E+04	7.20E+04	6.89E+04	7.05E+04		
20		7.12E+03	6.57E+03	6.27E+03	6.42E+03	3.56E+04	3.29E+04	3.14E+04	3.21E+04	7.12E+04	6.57E+04	6.27E+04	6.42E+04		
25		6.54E+03	6.05E+03	5.76E+03	5.90E+03	3.27E+04	3.03E+04	2.88E+04	2.95E+04	6.54E+04	6.05E+04	5.76E+04	5.90E+04		
30		5.96E+03	5.54E+03	5.25E+03	5.37E+03	2.98E+04	2.77E+04	2.62E+04	2.69E+04	5.96E+04	5.54E+04	5.25E+04	5.37E+04		

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		1.04E+04	1.04E+04	6.84E+03	6.84E+03	5.19E+04	5.19E+04	3.42E+04	3.42E+04	1.04E+05	1.04E+05	6.84E+04	6.84E+04		
1		1.04E+04	1.04E+04	6.97E+03	6.97E+03	5.22E+04	5.22E+04	3.49E+04	3.49E+04	1.04E+05	1.04E+05	6.97E+04	6.97E+04		
2		1.03E+04	1.03E+04	6.77E+03	6.77E+03	5.14E+04	5.14E+04	3.39E+04	3.39E+04	1.03E+05	1.03E+05	6.77E+04	6.77E+04		
4		1.01E+04	1.01E+04	6.31E+03	6.31E+03	5.05E+04	5.05E+04	3.16E+04	3.16E+04	1.01E+05	1.01E+05	6.31E+04	6.31E+04		
6		9.95E+03	9.95E+03	5.96E+03	5.96E+03	4.98E+04	4.98E+04	2.98E+04	2.98E+04	9.95E+04	9.95E+04	5.96E+04	5.96E+04		
8		9.78E+03	9.78E+03	5.69E+03	5.69E+03	4.89E+04	4.89E+04	2.85E+04	2.85E+04	9.78E+04	9.78E+04	5.69E+04	5.69E+04		
10		9.57E+03	9.57E+03	5.48E+03	5.48E+03	4.78E+04	4.78E+04	2.74E+04	2.74E+04	9.57E+04	9.57E+04	5.48E+04	5.48E+04		
12		9.34E+03	9.34E+03	5.30E+03	5.30E+03	4.67E+04	4.67E+04	2.65E+04	2.65E+04	9.34E+04	9.34E+04	5.30E+04	5.30E+04		
14		9.08E+03	9.08E+03	5.14E+03	5.14E+03	4.54E+04	4.54E+04	2.57E+04	2.57E+04	9.08E+04	9.08E+04	5.14E+04	5.14E+04		
16		8.82E+03	8.82E+03	4.99E+03	4.99E+03	4.41E+04	4.41E+04	2.49E+04	2.49E+04	8.82E+04	8.82E+04	4.99E+04	4.99E+04		
18		8.54E+03	8.54E+03	4.85E+03	4.85E+03	4.27E+04	4.27E+04	2.42E+04	2.42E+04	8.54E+04	8.54E+04	4.85E+04	4.85E+04		
20		8.26E+03	8.26E+03	4.71E+03	4.71E+03	4.13E+04	4.13E+04	2.35E+04	2.35E+04	8.26E+04	8.26E+04	4.71E+04	4.71E+04		
1		7.71E+03	7.71E+03	4.45E+03	4.45E+03	3.85E+04	3.85E+04	2.22E+04	2.22E+04	7.71E+04	7.71E+04	4.45E+04	4.45E+04		
2		5.03E+03	5.03E+03	3.26E+03	3.26E+03	2.51E+04	2.51E+04	1.63E+04	1.63E+04	5.03E+04	5.03E+04	3.26E+04	3.26E+04		
3		3.69E+03	3.69E+03	2.67E+03	2.67E+03	1.84E+04	1.84E+04	1.34E+04	1.34E+04	3.69E+04	3.69E+04	2.67E+04	2.67E+04		
4		3.10E+03	3.10E+03	2.40E+03	2.40E+03	1.55E+04	1.55E+04	1.20E+04	1.20E+04	3.10E+04	3.10E+04	2.40E+04	2.40E+04		
5		2.84E+03	2.84E+03	2.27E+03	2.27E+03	1.42E+04	1.42E+04	1.14E+04	1.14E+04	2.84E+04	2.84E+04	2.27E+04	2.27E+04		
6		2.71E+03	2.71E+03	2.20E+03	2.20E+03	1.36E+04	1.36E+04	1.10E+04	1.10E+04	2.71E+04	2.71E+04	2.20E+04	2.20E+04		
7		2.63E+03	2.63E+03	2.14E+03	2.14E+03	1.32E+04	1.32E+04	1.07E+04	1.07E+04	2.63E+04	2.63E+04	2.14E+04	2.14E+04		
8		2.57E+03	2.57E+03	2.10E+03	2.10E+03	1.29E+04	1.29E+04	1.05E+04	1.05E+04	2.57E+04	2.57E+04	2.10E+04	2.10E+04		
9		2.52E+03	2.52E+03	2.05E+03	2.05E+03	1.26E+04	1.26E+04	1.03E+04	1.03E+04	2.52E+04	2.52E+04	2.05E+04	2.05E+04		
10		2.47E+03	2.4												

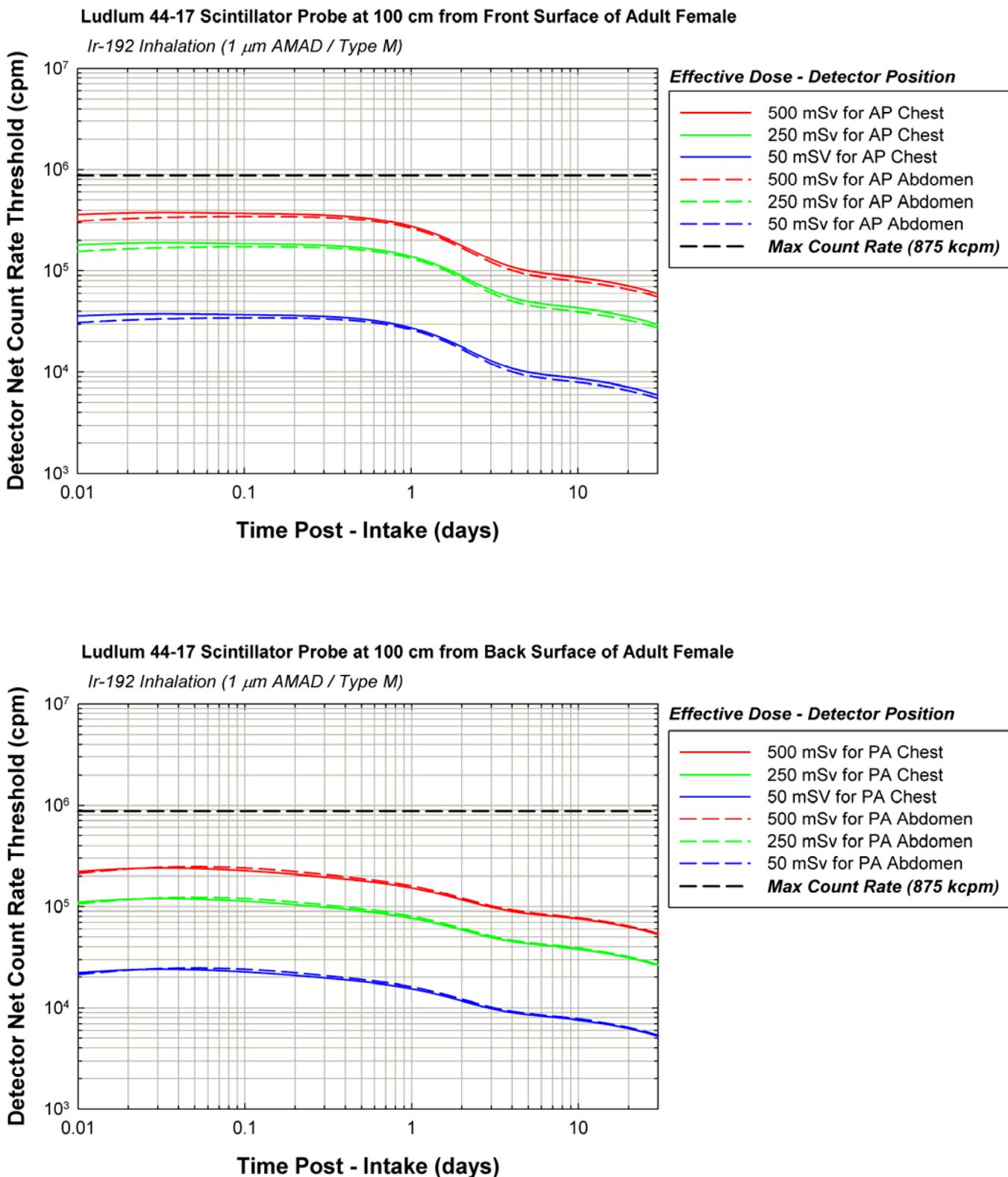
**Table D16 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 1- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



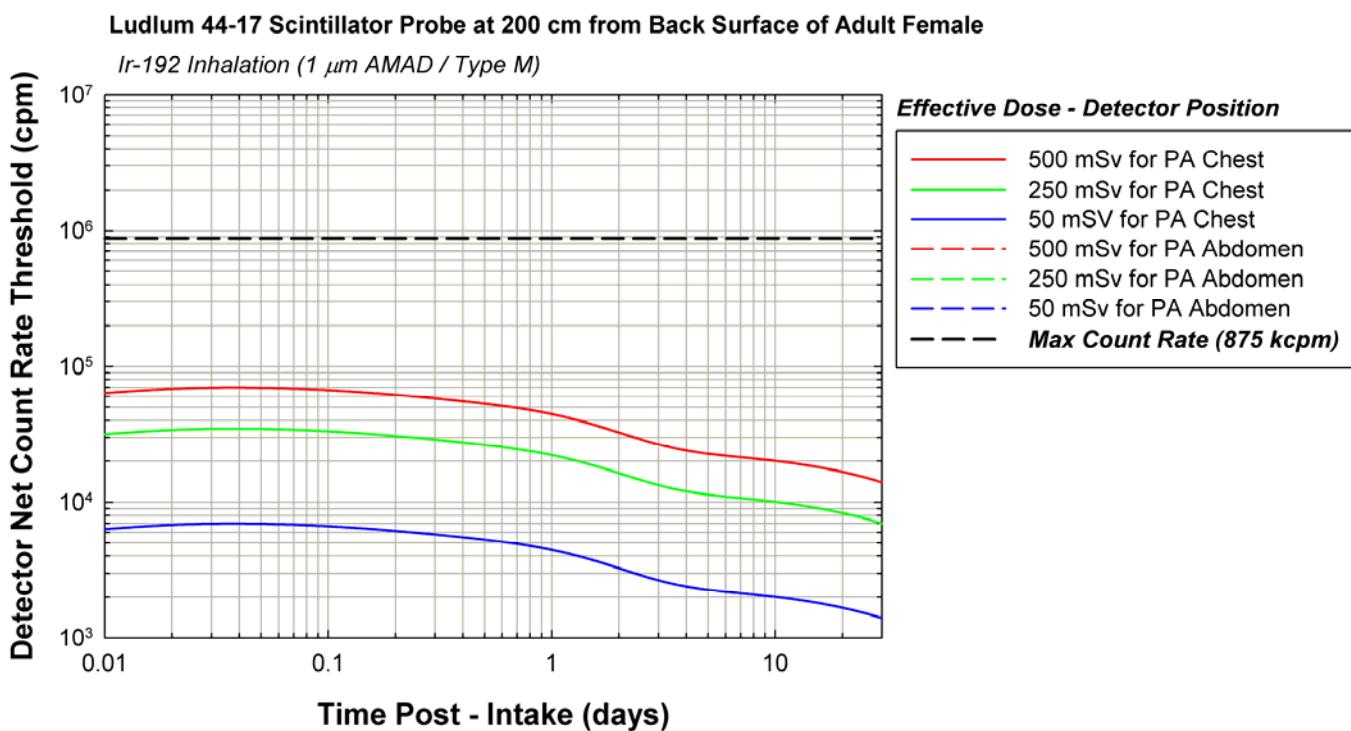
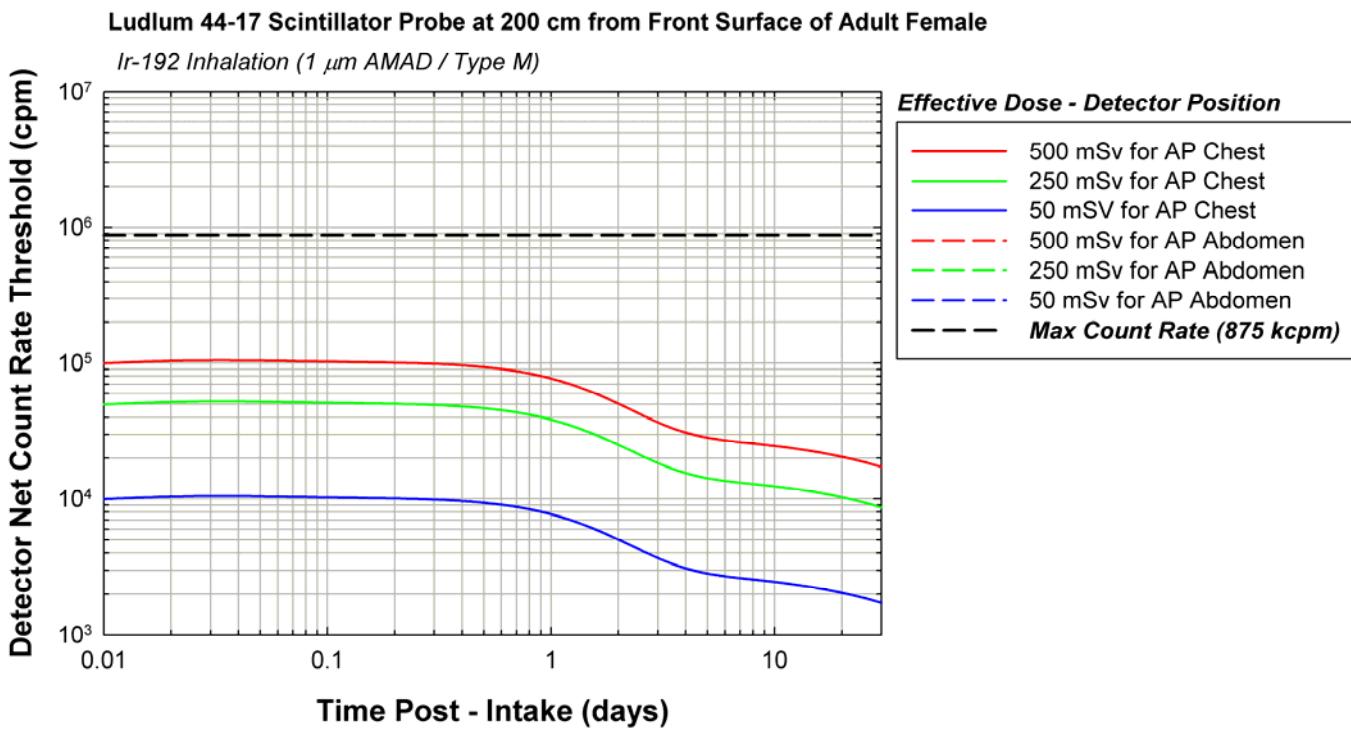
**Table D16 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 1- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D16 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 1- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D16 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 1- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D17 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iridium-192, Inhalation, 1-μm AMAD Aerosol, Type S, f<sub>A</sub> = 0.01 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)																									
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED								Net Count Rate (cpm) for 250 mSv ED								Net Count Rate (cpm) for 500 mSv ED							
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen								
0.5		4.81E+05	3.54E+05	3.03E+05	2.40E+05	2.41E+06	1.77E+06	1.52E+06	1.20E+06	4.81E+06	3.54E+06	3.03E+06	2.40E+06												
1		4.53E+05	4.16E+05	2.94E+05	2.73E+05	2.27E+06	2.08E+06	1.47E+06	1.37E+06	4.53E+06	4.16E+06	2.94E+06	2.73E+06												
2		4.16E+05	4.64E+05	2.73E+05	2.77E+05	2.08E+06	2.32E+06	1.37E+06	1.39E+06	4.16E+06	4.64E+06	2.73E+06	2.77E+06												
4		3.87E+05	5.12E+05	2.54E+05	2.52E+05	1.93E+06	2.56E+06	1.27E+06	1.26E+06	3.87E+06	5.12E+06	2.54E+06	2.52E+06												
6		3.73E+05	5.40E+05	2.45E+05	2.28E+05	1.87E+06	2.70E+06	1.23E+06	1.14E+06	3.73E+06	5.40E+06	2.45E+06	2.28E+06												
8		3.64E+05	5.56E+05	2.39E+05	2.12E+05	1.82E+06	2.78E+06	1.20E+06	1.06E+06	3.64E+06	5.56E+06	2.39E+06	2.12E+06												
10		3.55E+05	5.64E+05	2.35E+05	2.01E+05	1.78E+06	2.82E+06	1.17E+06	1.00E+06	3.55E+06	5.64E+06	2.35E+06	2.01E+06												
12		3.48E+05	5.64E+05	2.31E+05	1.92E+05	1.74E+06	2.82E+06	1.16E+06	9.62E+05	3.48E+06	5.64E+06	2.31E+06	1.92E+06												
14		3.41E+05	5.59E+05	2.28E+05	1.86E+05	1.71E+06	2.79E+06	1.14E+06	9.28E+05	3.41E+06	5.59E+06	2.28E+06	1.86E+06												
16		3.35E+05	5.49E+05	2.25E+05	1.79E+05	1.67E+06	2.75E+06	1.13E+06	8.97E+05	3.35E+06	5.49E+06	2.25E+06	1.79E+06												
18		3.28E+05	5.36E+05	2.23E+05	1.73E+05	1.64E+06	2.68E+06	1.11E+06	8.67E+05	3.28E+06	5.36E+06	2.23E+06	1.73E+06												
20		3.22E+05	5.21E+05	2.20E+05	1.68E+05	1.61E+06	2.60E+06	1.10E+06	8.39E+05	3.22E+06	5.21E+06	2.20E+06	1.68E+06												
1		3.11E+05	4.85E+05	2.16E+05	1.56E+05	1.56E+06	2.42E+06	1.08E+06	7.82E+05	3.11E+06	4.85E+06	2.16E+06	1.56E+06												
2		2.63E+05	2.61E+05	1.95E+05	9.85E+04	1.31E+06	1.30E+06	9.73E+05	4.93E+05	2.63E+06	2.61E+06	1.95E+06	9.85E+05												
3		2.38E+05	1.34E+05	1.83E+05	6.74E+04	1.19E+06	6.70E+05	9.15E+05	3.37E+05	2.38E+06	1.34E+06	1.83E+06	6.74E+05												
4		2.26E+05	7.94E+04	1.76E+05	5.39E+04	1.13E+06	3.97E+05	8.82E+05	2.69E+05	2.26E+06	7.94E+05	1.76E+06	5.39E+05												
5		2.19E+05	5.76E+04	1.72E+05	4.81E+04	1.10E+06	2.88E+05	8.60E+05	2.40E+05	2.19E+06	5.76E+05	1.72E+06	4.81E+05												
6		2.14E+05	4.89E+04	1.68E+05	4.54E+04	1.07E+06	2.44E+05	8.42E+05	2.27E+05	2.14E+06	4.89E+05	1.68E+06	4.54E+05												
7		2.10E+05	4.51E+04	1.65E+05	4.39E+04	1.05E+06	2.26E+05	8.26E+05	2.20E+05	2.10E+06	4.51E+05	1.65E+06	4.39E+05												
8		2.06E+05	4.32E+04	1.62E+05	4.29E+04	1.03E+06	2.16E+05	8.11E+05	2.14E+05	2.06E+06	4.32E+05	1.62E+06	4.29E+05												
9		2.02E+05	4.20E+04	1.59E+05	4.20E+04	1.01E+06	2.10E+05	7.96E+05	2.10E+05	2.02E+06	4.20E+05	1.59E+06	4.20E+05												
10		1.99E+05	4.11E+04	1.56E+05	4.12E+04	9.93E+05	2.06E+05	7.82E+05	2.06E+05	1.99E+06	4.11E+05	1.56E+06	4.12E+05												
15		1.83E+05	3.76E+04	1.44E+05	3.80E+04	9.14E+05	1.88E+05	7.21E+05	1.90E+05	1.83E+06	3.76E+05	1.44E+06	3.80E+05												
20		1.67E+05	3.42E+04	1.32E+05	3.47E+04	8.36E+05	1.71E+05	6.59E+05	1.73E+05	1.67E+06	3.42E+05	1.32E+06	3.47E+05												
25		1.55E+05	3.15E+04	1.22E+05	3.21E+04	7.74E+05	1.57E+05	6.10E+05	1.60E+05	1.55E+06	3.15E+05	1.22E+06	3.21E+05												
30		1.42E+05	2.88E+04	1.12E+05	2.95E+04	7.12E+05	1.44E+05	5.61E+05	1.47E+05	1.42E+06	2.88E+05	1.12E+06	2.95E+05												

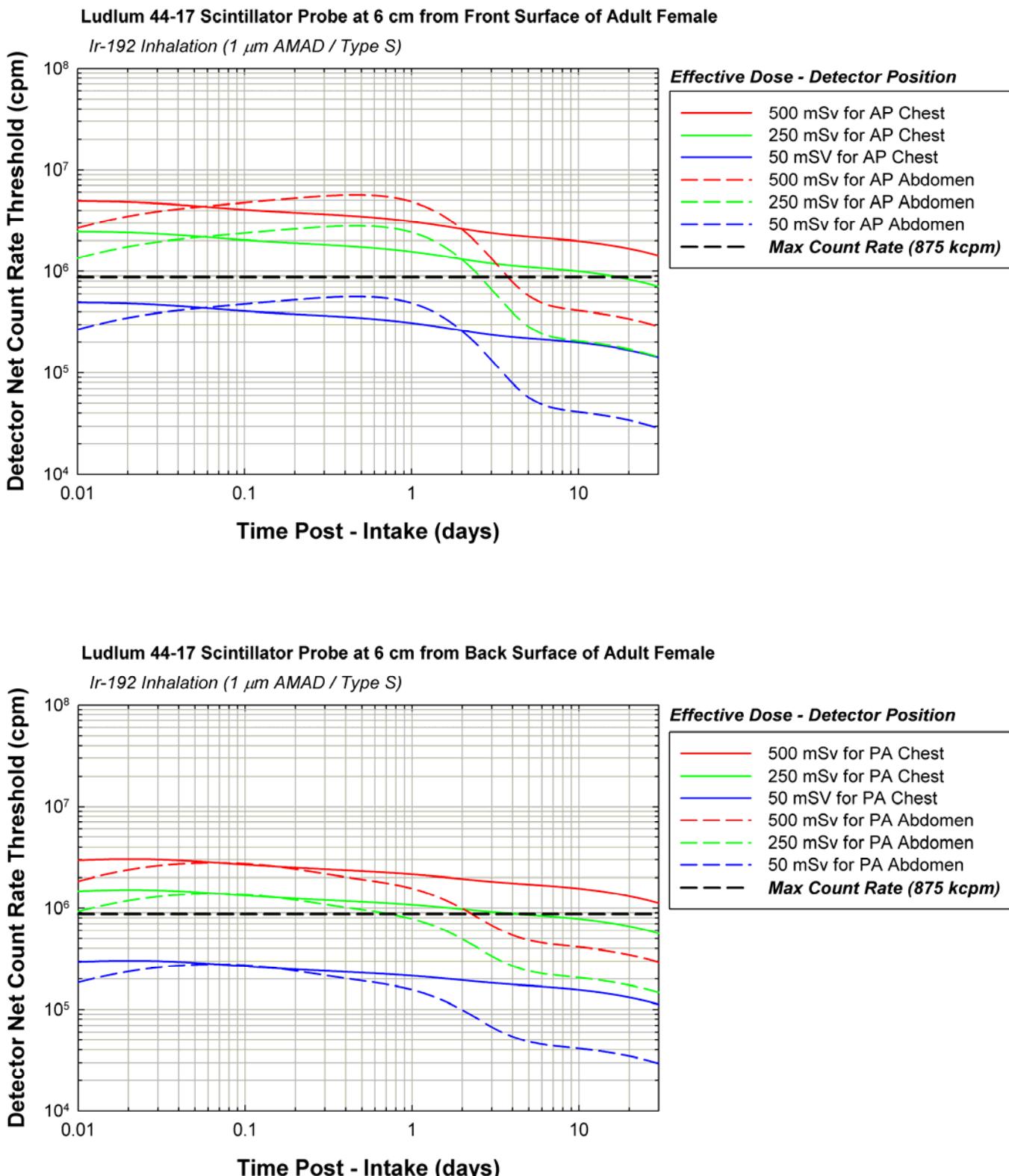
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)																									
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED								Net Count Rate (cpm) for 250 mSv ED								Net Count Rate (cpm) for 500 mSv ED							
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen								
0.5		1.70E+05	1.28E+05	9.18E+04	8.99E+04	8.50E+05	6.41E+05	4.59E+05	4.49E+05	1.70E+06	1.28E+06	9.18E+05	8.99E+05												
1		1.64E+05	1.37E+05	9.22E+04	9.61E+04	8.21E+05	6.83E+05	4.61E+05	4.81E+05	1.64E+06	1.37E+06	9.22E+05	9.61E+05												
2		1.54E+05	1.40E+05	8.76E+04	9.52E+04	7.68E+05	7.02E+05	4.38E+05	4.76E+05	1.54E+06	1.40E+06	8.76E+05	9.52E+05												
4		1.45E+05	1.45E+05	8.10E+04	8.84E+04	7.27E+05	7.24E+05	4.05E+05	4.42E+05	1.45E+06	1.45E+06	8.10E+05	8.84E+05												
6		1.42E+05	1.47E+05	7.68E+04	8.30E+04	7.08E+05	7.34E+05	3.84E+05	4.15E+05	1.42E+06	1.47E+06	7.68E+05	8.30E+05												
8		1.38E+05	1.47E+05	7.40E+04	7.91E+04	6.92E+05	7.35E+05	3.70E+05	3.95E+05	1.38E+06	1.47E+06	7.40E+05	7.91E+05												
10		1.35E+05	1.46E+05	7.18E+04	7.62E+04	6.76E+05	7.29E+05	3.59E+05	3.81E+05	1.35E+06	1.46E+06	7.18E+05	7.62E+05												
12		1.32E+05	1.43E+05	7.00E+04	7.39E+04	6.60E+05	7.17E+05	3.50E+05	3.70E+05	1.32E+06	1.43E+06	7.00E+05	7.39E+05												
14		1.29E+05	1.40E+05	6.85E+04	7.20E+04	6.44E+05	7.01E+05	3.42E+05	3.60E+05	1.29E+06	1.40E+06	6.85E+05	7.20E+05												
16		1.25E+05	1.37E+05	6.71E+04	7.01E+04	6.27E+05	6.83E+05	3.35E+05	3.50E+05	1.25E+06	1.37E+06	6.71E+05	7.01E+05												
18		1.22E+05	1.32E+05	6.57E+04	6.83E+04	6.09E+05	6.62E+05	3.29E+05	3.41E+05	1.22E+06	1.32E+06	6.57E+05	6.83E+05												
20		1.18E+05	1.28E+05	6.44E+04	6.65E+04	5.92E+05	6.40E+05	3.22E+05	3.32E+05	1.18E+06	1.28E+06	6.44E+05	6.65E+05												
1		1.11E+05	1.19E+05	6.20E+04	6.30E+04	5.57E+05	5.93E+05	3.10E+05	3.15E+05	1.11E+06	1.19E+06	6.20E+05	6.30E+05												
2		7.81E+04	6.94E+04	5.06E+04	4.51E+04	3.90E+05	3.47E+05	2.53E+05	2.25E+05	7.81E+05	6.94E+05	5.06E+05	4.51E+05												
3		6.12E+04	4.36E+04	4.46E+04	3.55E+04	3.06E+05	2.18E+05	2.23E+05	1.78E+05	6.12E+05	4.36E+05	4.46E+05	3.55E+05												
4		5.37E+04	3.26E+04	4.17E+04	3.12E+04	2.69E+05	1.63E+05	2.09E+05	1.56E+05	5.37E+05	3.26E+05	4.17E+05	3.12E+05												
5		5.03E+04	2.81E+04	4.02E+04	2.92E+04	2.51E+05	1.40E+05	2.01E+05	1.46E+05	5.03E+05	2.81E+05	4.02E+05	2.92E+05												
6		4.85E+04	2.61E+04	3.91E+04	2.82E+04	2.42E+05	1.30E+05	1.96E+05	1.41E+05	4.85E+05	2.61E+05	3.91E+05	2.82E+05												
7		4.73E+04	2.51E+04	3.83E+04	2.75E+04	2.36E+05	1.25E+05	1.92E+05	1.37E+05	4.73E+05	2.51E+05	3.83E+05	2.75E+05												
8		4.63E+04	2.44E+04	3.76E+04	2.69E+04	2.31E+05	1.22E+05	1.88E+05	1.35E+05	4.63E+05	2.44E+05	3.76E+05	2.69E+05												
9		4.54E+04	2.39E+04	3.69E+04	2.64E+04	2.27E+05	1.19E+05	1.85E+05	1.32E+05	4.54E+05	2.39E+05	3.69E+05	2.64E+05												
10		4.46E+04	2.34E+04	3.63E+04	2.59E+04	2																			

**Table D17 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iridium-192, Inhalation, 1-μm AMAD Aerosol, Type S, f<sub>A</sub> = 0.01 Ludlum 44-17 Scintillator Probe**

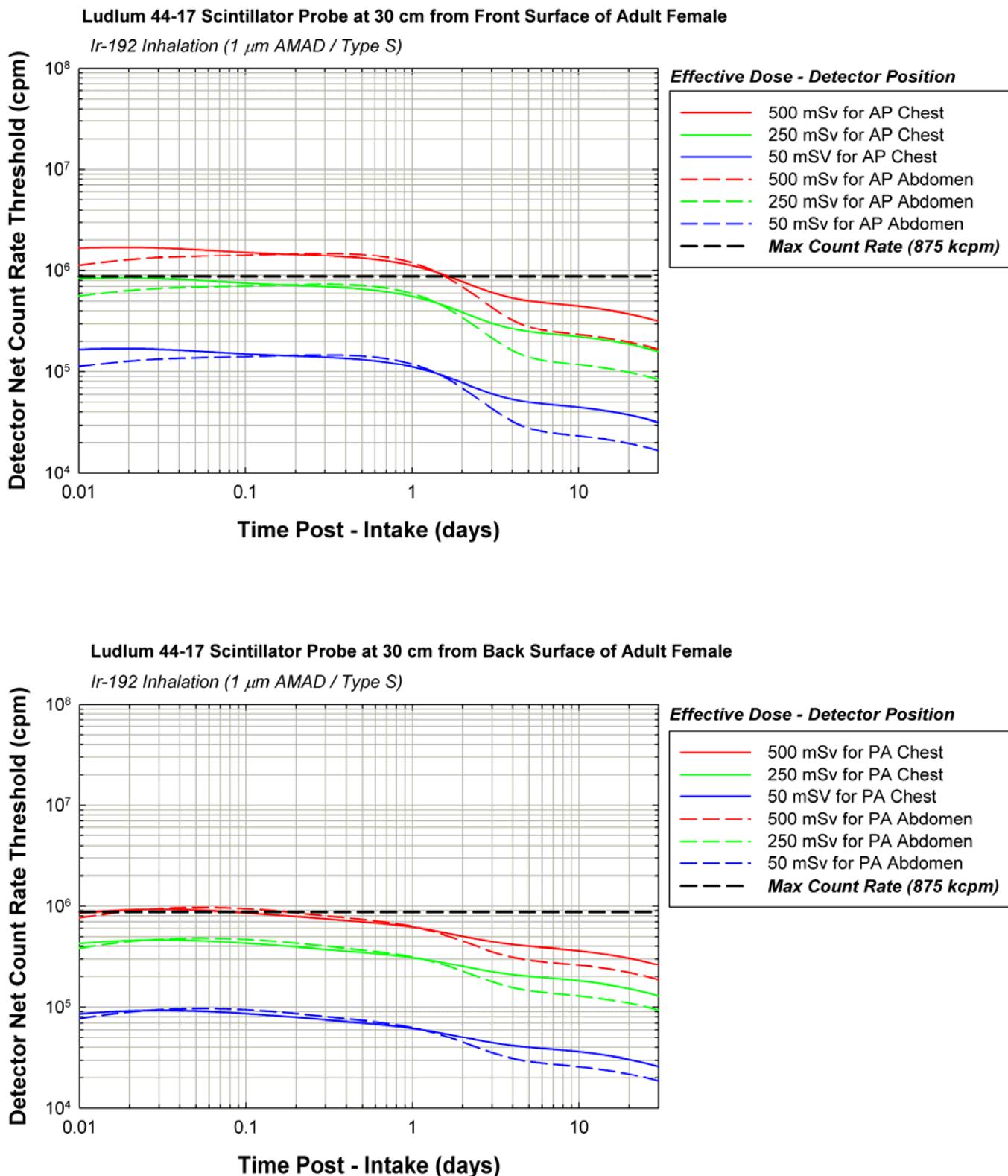
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	2.97E+04	2.60E+04	1.88E+04	1.86E+04	1.49E+05	1.30E+05	9.39E+04	9.31E+04	2.97E+05	2.60E+05	1.88E+05	1.86E+05		
	1	2.99E+04	2.70E+04	1.90E+04	1.95E+04	1.50E+05	1.35E+05	9.50E+04	9.77E+04	2.99E+05	2.70E+05	1.90E+05	1.95E+05		
	2	2.96E+04	2.74E+04	1.82E+04	1.93E+04	1.48E+05	1.37E+05	9.12E+04	9.65E+04	2.96E+05	2.74E+05	1.82E+05	1.93E+05		
	4	2.92E+04	2.74E+04	1.69E+04	1.80E+04	1.46E+05	1.37E+05	8.47E+04	9.02E+04	2.92E+05	2.74E+05	1.69E+05	1.80E+05		
	6	2.88E+04	2.72E+04	1.61E+04	1.70E+04	1.44E+05	1.36E+05	8.03E+04	8.49E+04	2.88E+05	2.72E+05	1.61E+05	1.70E+05		
	8	2.83E+04	2.68E+04	1.54E+04	1.62E+04	1.42E+05	1.34E+05	7.69E+04	8.10E+04	2.83E+05	2.68E+05	1.54E+05	1.62E+05		
	10	2.77E+04	2.62E+04	1.49E+04	1.56E+04	1.38E+05	1.31E+05	7.43E+04	7.80E+04	2.77E+05	2.62E+05	1.49E+05	1.56E+05		
	12	2.70E+04	2.56E+04	1.44E+04	1.51E+04	1.35E+05	1.28E+05	7.20E+04	7.55E+04	2.70E+05	2.56E+05	1.44E+05	1.51E+05		
	14	2.62E+04	2.49E+04	1.40E+04	1.47E+04	1.31E+05	1.25E+05	7.00E+04	7.33E+04	2.62E+05	2.49E+05	1.40E+05	1.47E+05		
	16	2.54E+04	2.42E+04	1.36E+04	1.43E+04	1.27E+05	1.21E+05	6.81E+04	7.13E+04	2.54E+05	2.42E+05	1.36E+05	1.43E+05		
	18	2.46E+04	2.34E+04	1.33E+04	1.39E+04	1.23E+05	1.17E+05	6.63E+04	6.94E+04	2.46E+05	2.34E+05	1.33E+05	1.39E+05		
	20	2.38E+04	2.26E+04	1.29E+04	1.35E+04	1.19E+05	1.13E+05	6.45E+04	6.76E+04	2.38E+05	2.26E+05	1.29E+05	1.35E+05		
1	2.21E+04	2.10E+04	1.22E+04	1.28E+04	1.10E+05	1.05E+05	6.12E+04	6.41E+04	2.21E+05	2.10E+05	1.22E+05	1.28E+05			
2	1.41E+04	1.32E+04	9.25E+03	9.62E+03	7.07E+04	6.62E+04	4.62E+04	4.81E+04	1.41E+05	1.32E+05	9.25E+04	9.62E+04			
3	1.02E+04	9.36E+03	7.75E+03	8.01E+03	5.10E+04	4.68E+04	3.88E+04	4.00E+04	1.02E+05	9.36E+04	7.75E+04	8.01E+04			
4	8.51E+03	7.69E+03	7.07E+03	7.27E+03	4.26E+04	3.85E+04	3.54E+04	3.64E+04	8.51E+04	7.69E+04	7.07E+04	7.27E+04			
5	7.78E+03	6.98E+03	6.74E+03	6.92E+03	3.89E+04	3.49E+04	3.37E+04	3.46E+04	7.78E+04	6.98E+04	6.74E+04	6.92E+04			
6	7.42E+03	6.64E+03	6.54E+03	6.71E+03	3.71E+04	3.32E+04	3.27E+04	3.35E+04	7.42E+04	6.64E+04	6.54E+04	6.71E+04			
7	7.21E+03	6.44E+03	6.40E+03	6.56E+03	3.61E+04	3.22E+04	3.20E+04	3.28E+04	7.21E+04	6.44E+04	6.40E+04	6.56E+04			
8	7.05E+03	6.29E+03	6.27E+03	6.43E+03	3.53E+04	3.15E+04	3.14E+04	3.21E+04	7.05E+04	6.29E+04	6.27E+04	6.43E+04			
9	6.92E+03	6.17E+03	6.16E+03	6.31E+03	3.46E+04	3.08E+04	3.08E+04	3.15E+04	6.92E+04	6.17E+04	6.16E+04	6.31E+04			
10	6.79E+03	6.05E+03	6.05E+03	6.20E+03	3.39E+04	3.03E+04	3.02E+04	3.10E+04	6.79E+04	6.05E+04	6.05E+04	6.20E+04			
15	6.22E+03	5.54E+03	5.54E+03	5.68E+03	3.11E+04	2.77E+04	2.77E+04	2.84E+04	6.22E+04	5.54E+04	5.54E+04	5.68E+04			
20	5.71E+03	5.09E+03	5.09E+03	5.22E+03	2.85E+04	2.55E+04	2.55E+04	2.61E+04	5.71E+04	5.09E+04	5.09E+04	5.22E+04			
25	5.28E+03	4.71E+03	4.71E+03	4.83E+03	2.64E+04	2.35E+04	2.36E+04	2.41E+04	5.28E+04	4.71E+04	4.71E+04	4.83E+04			
30	4.86E+03	4.33E+03	4.33E+03	4.44E+03	2.43E+04	2.16E+04	2.17E+04	2.22E+04	4.86E+04	4.33E+04	4.33E+04	4.44E+04			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	8.21E+03	8.21E+03	5.40E+03	5.40E+03	4.10E+04	4.10E+04	2.70E+04	2.70E+04	8.21E+04	8.21E+04	5.40E+04	5.40E+04		
	1	8.28E+03	8.28E+03	5.52E+03	5.52E+03	4.14E+04	4.14E+04	2.76E+04	2.76E+04	8.28E+04	8.28E+04	5.52E+04	5.52E+04		
	2	8.15E+03	8.15E+03	5.36E+03	5.36E+03	4.08E+04	4.08E+04	2.68E+04	2.68E+04	8.15E+04	8.15E+04	5.36E+04	5.36E+04		
	4	8.02E+03	8.02E+03	4.99E+03	4.99E+03	4.01E+04	4.01E+04	2.50E+04	2.50E+04	8.02E+04	8.02E+04	4.99E+04	4.99E+04		
	6	7.91E+03	7.91E+03	4.72E+03	4.72E+03	3.95E+04	3.95E+04	2.36E+04	2.36E+04	7.91E+04	7.91E+04	4.72E+04	4.72E+04		
	8	7.77E+03	7.77E+03	4.51E+03	4.51E+03	3.89E+04	3.89E+04	2.25E+04	2.25E+04	7.77E+04	7.77E+04	4.51E+04	4.51E+04		
	10	7.61E+03	7.61E+03	4.34E+03	4.34E+03	3.81E+04	3.81E+04	2.17E+04	2.17E+04	7.61E+04	7.61E+04	4.34E+04	4.34E+04		
	12	7.43E+03	7.43E+03	4.20E+03	4.20E+03	3.71E+04	3.71E+04	2.10E+04	2.10E+04	7.43E+04	7.43E+04	4.20E+04	4.20E+04		
	14	7.23E+03	7.23E+03	4.07E+03	4.07E+03	3.61E+04	3.61E+04	2.04E+04	2.04E+04	7.23E+04	7.23E+04	4.07E+04	4.07E+04		
	16	7.01E+03	7.01E+03	3.95E+03	3.95E+03	3.51E+04	3.51E+04	1.98E+04	1.98E+04	7.01E+04	7.01E+04	3.95E+04	3.95E+04		
	18	6.79E+03	6.79E+03	3.84E+03	3.84E+03	3.40E+04	3.40E+04	1.92E+04	1.92E+04	6.79E+04	6.79E+04	3.84E+04	3.84E+04		
	20	6.57E+03	6.57E+03	3.73E+03	3.73E+03	3.29E+04	3.29E+04	1.86E+04	1.86E+04	6.57E+04	6.57E+04	3.73E+04	3.73E+04		
1	6.12E+03	6.12E+03	3.52E+03	3.52E+03	3.06E+04	3.06E+04	1.76E+04	1.76E+04	6.12E+04	6.12E+04	3.52E+04	3.52E+04			
2	3.94E+03	3.94E+03	2.56E+03	2.56E+03	1.97E+04	1.97E+04	1.28E+04	1.28E+04	3.94E+04	3.94E+04	2.56E+04	2.56E+04			
3	2.85E+03	2.85E+03	2.08E+03	2.08E+03	1.42E+04	1.42E+04	1.04E+04	1.04E+04	2.85E+04	2.85E+04	2.08E+04	2.08E+04			
4	2.38E+03	2.38E+03	1.87E+03	1.87E+03	1.19E+04	1.19E+04	9.34E+03	9.34E+03	2.38E+04	2.38E+04	1.87E+04	1.87E+04			
5	2.17E+03	2.17E+03	1.77E+03	1.77E+03	1.09E+04	1.09E+04	8.84E+03	8.84E+03	2.17E+04	2.17E+04	1.77E+04	1.77E+04			
6	2.07E+03	2.07E+03	1.71E+03	1.71E+03	1.04E+04	1.04E+04	8.55E+03	8.55E+03	2.07E+04	2.07E+04	1.71E+04	1.71E+04			
7	2.01E+03	2.01E+03	1.67E+03	1.67E+03	1.01E+04	1.01E+04	8.35E+03	8.35E+03	2.01E+04	2.01E+04	1.67E+04	1.67E+04			
8	1.97E+03	1.97E+03	1.64E+03	1.64E+03	9.85E+03	9.85E+03	8.18E+03	8.18E+03	1.97E+04	1.97E+04	1.64E+04	1.64E+04			
9	1.93E+03	1.93E+03	1.61E+03	1.61E+03	9.66E+03	9.66E+03	8.03E+03	8.03E+03	1.93E+04	1.93E+04	1.61E+04	1.61E+04			
10	1.90E+03	1.90E+03	1.58E+03	1.58E+03	9.48E+03	9.48E+03	7.89E+03	7.89E+03	1.90E+04						

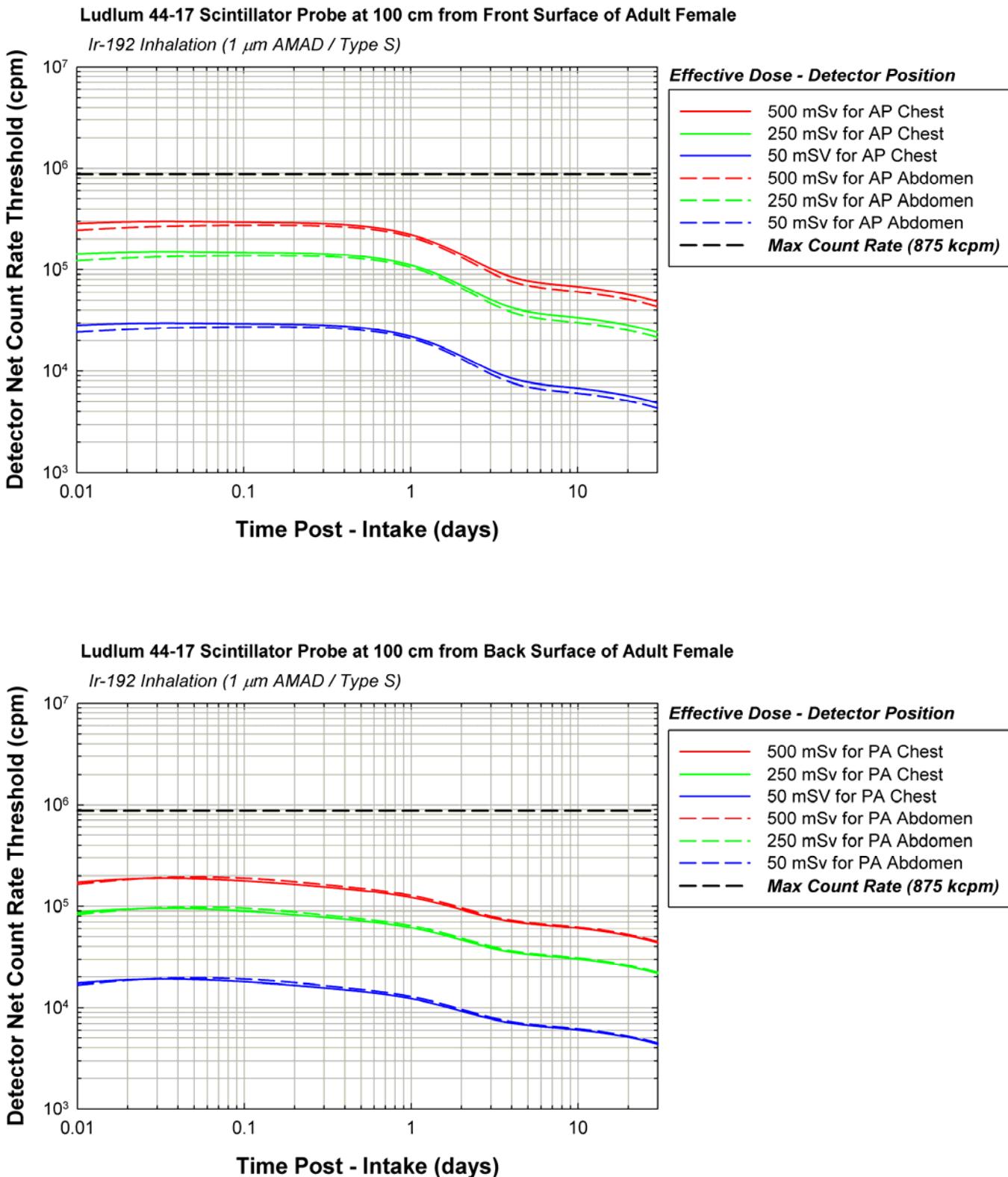
**Table D17 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 1- $\mu$ m AMAD Aerosol, Type S,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



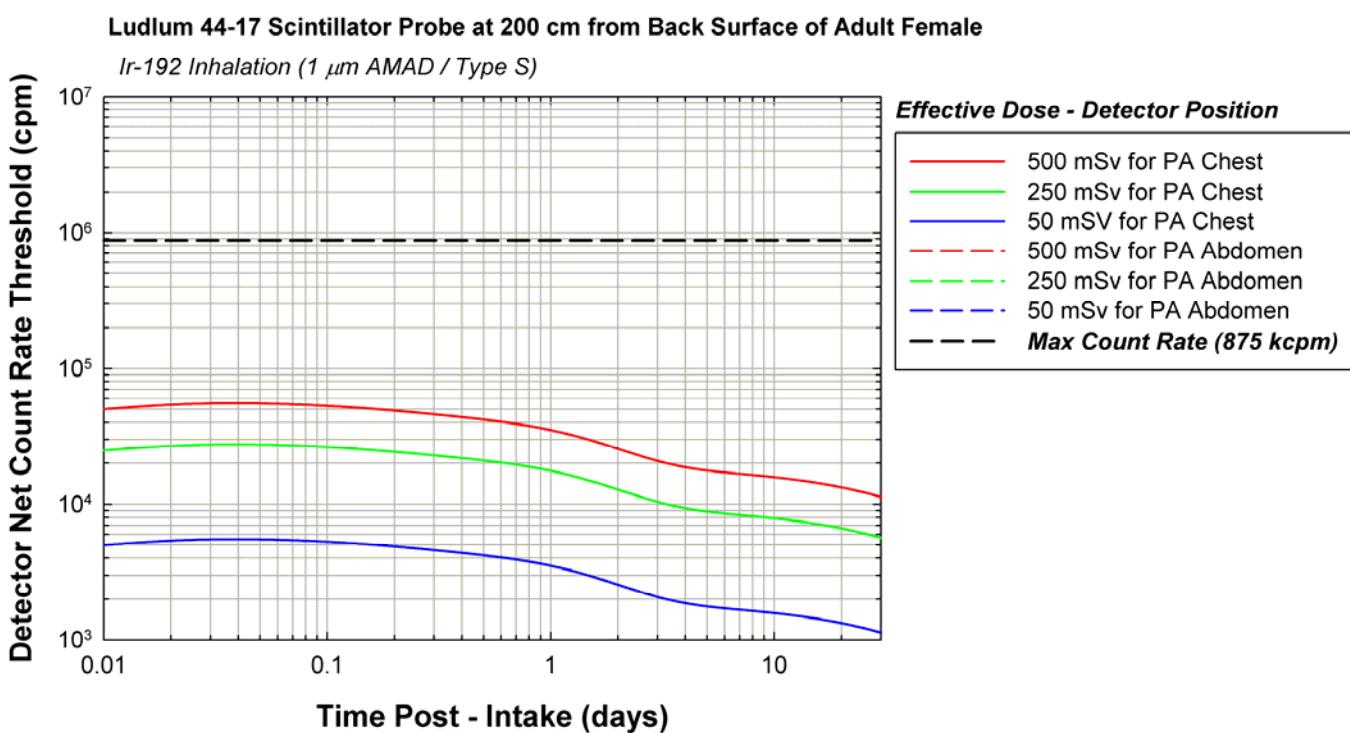
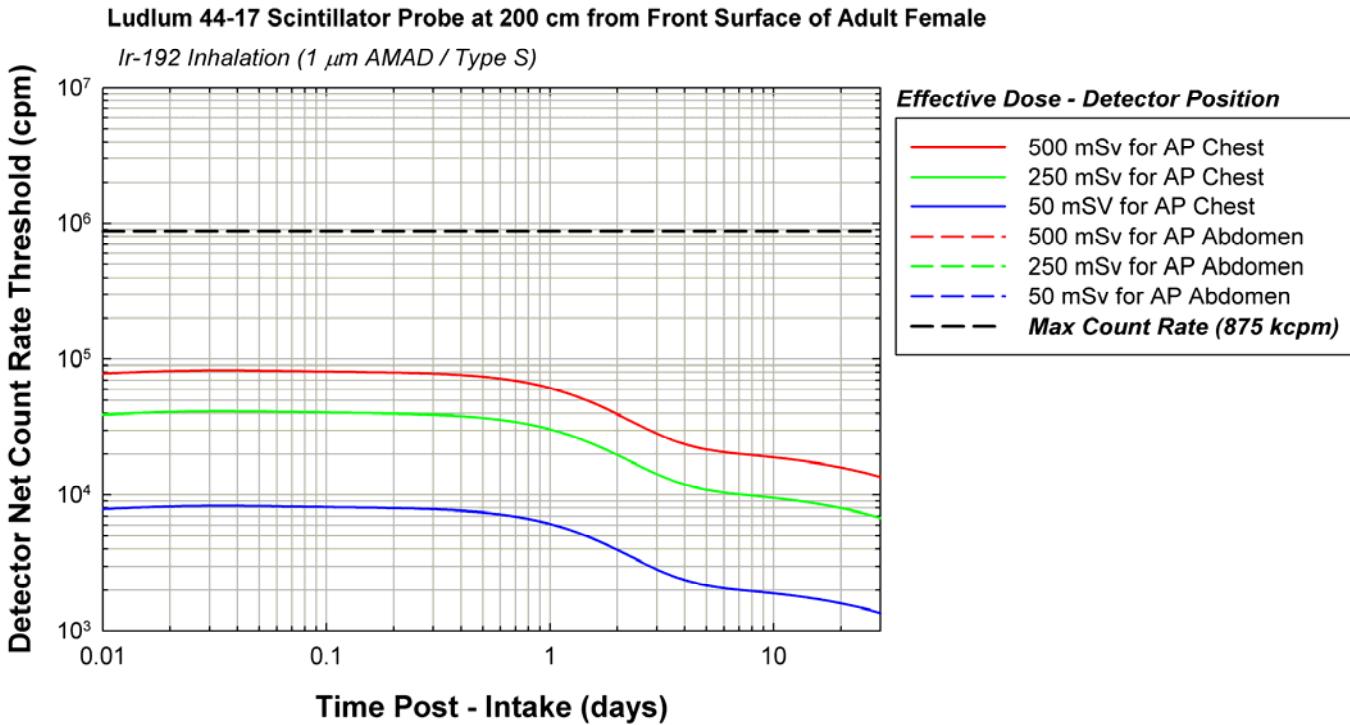
**Table D17 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 1- $\mu$ m AMAD Aerosol, Type S,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D17 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 1- $\mu$ m AMAD Aerosol, Type S,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D17 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 1- $\mu$ m AMAD Aerosol, Type S,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D18 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iridium-192, Inhalation, 5-μm AMAD Aerosol, Type F, f<sub>A</sub> = 0.01 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		2.16E+06	1.73E+06	1.13E+06	1.11E+06	1.08E+07	8.63E+06	5.67E+06	5.53E+06	2.16E+07	1.73E+07	1.13E+07	1.11E+07		
1		2.02E+06	1.86E+06	1.06E+06	1.16E+06	1.01E+07	9.28E+06	5.28E+06	5.79E+06	2.02E+07	1.86E+07	1.06E+07	1.16E+07		
2		1.82E+06	1.99E+06	9.46E+05	1.15E+06	9.11E+06	9.94E+06	4.73E+06	5.77E+06	1.82E+07	1.99E+07	9.46E+06	1.15E+07		
4		1.57E+06	2.14E+06	8.07E+05	1.08E+06	7.86E+06	1.07E+07	4.04E+06	5.40E+06	1.57E+07	2.14E+07	8.07E+06	1.08E+07		
6		1.39E+06	2.22E+06	7.11E+05	1.01E+06	6.97E+06	1.11E+07	3.55E+06	5.07E+06	1.39E+07	2.22E+07	7.11E+06	1.01E+07		
8		1.25E+06	2.27E+06	6.37E+05	9.68E+05	6.26E+06	1.14E+07	3.18E+06	4.84E+06	1.25E+07	2.27E+07	6.37E+06	9.68E+06		
10		1.14E+06	2.29E+06	5.78E+05	9.36E+05	5.68E+06	1.15E+07	2.89E+06	4.68E+06	1.14E+07	2.29E+07	5.78E+06	9.36E+06		
12		1.04E+06	2.30E+06	5.30E+05	9.11E+05	5.18E+06	1.15E+07	2.65E+06	4.56E+06	1.04E+07	2.30E+07	5.30E+06	9.11E+06		
14		9.56E+05	2.28E+06	4.92E+05	8.91E+05	4.78E+06	1.14E+07	2.46E+06	4.45E+06	9.56E+06	2.28E+07	4.92E+06	8.91E+06		
16		8.86E+05	2.25E+06	4.60E+05	8.72E+05	4.43E+06	1.12E+07	2.30E+06	4.36E+06	8.86E+06	2.25E+07	4.60E+06	8.72E+06		
18		8.26E+05	2.20E+06	4.33E+05	8.54E+05	4.13E+06	1.10E+07	2.17E+06	4.27E+06	8.26E+06	2.20E+07	4.33E+06	8.54E+06		
20		7.73E+05	2.16E+06	4.11E+05	8.36E+05	3.87E+06	1.08E+07	2.05E+06	4.18E+06	7.73E+06	2.16E+07	4.11E+06	8.36E+06		
1		6.86E+05	2.04E+06	3.74E+05	8.00E+05	3.43E+06	1.02E+07	1.87E+06	4.00E+06	6.86E+06	2.04E+07	3.74E+06	8.00E+06		
2		4.25E+05	1.34E+06	2.73E+05	6.14E+05	2.13E+06	6.68E+06	1.36E+06	3.07E+06	4.25E+06	1.34E+07	2.73E+06	6.14E+06		
3		3.30E+05	9.34E+05	2.36E+05	5.10E+05	1.65E+06	4.67E+06	1.18E+06	2.55E+06	3.30E+06	9.34E+06	2.36E+06	5.10E+06		
4		2.89E+05	7.55E+05	2.18E+05	4.60E+05	1.45E+06	3.77E+06	1.09E+06	2.30E+06	2.89E+06	7.55E+06	2.18E+06	4.60E+06		
5		2.70E+05	6.75E+05	2.08E+05	4.34E+05	1.35E+06	3.37E+06	1.04E+06	2.17E+06	2.70E+06	6.75E+06	2.08E+06	4.34E+06		
6		2.59E+05	6.35E+05	2.01E+05	4.18E+05	1.29E+06	3.17E+06	1.01E+06	2.09E+06	2.59E+06	6.35E+06	2.01E+06	4.18E+06		
7		2.51E+05	6.11E+05	1.96E+05	4.06E+05	1.25E+06	3.05E+06	9.81E+05	2.03E+06	2.51E+06	6.11E+06	1.96E+06	4.06E+06		
8		2.45E+05	5.93E+05	1.91E+05	3.96E+05	1.22E+06	2.96E+06	9.57E+05	1.98E+06	2.45E+06	5.93E+06	1.91E+06	3.96E+06		
9		2.39E+05	5.78E+05	1.87E+05	3.87E+05	1.19E+06	2.89E+06	9.35E+05	1.93E+06	2.39E+06	5.78E+06	1.87E+06	3.87E+06		
10		2.34E+05	5.64E+05	1.83E+05	3.78E+05	1.17E+06	2.82E+06	9.15E+05	1.89E+06	2.34E+06	5.64E+06	1.83E+06	3.78E+06		
15		2.13E+05	5.13E+05	1.67E+05	3.45E+05	1.07E+06	2.57E+06	8.36E+05	1.73E+06	2.13E+06	5.13E+06	1.67E+06	3.45E+06		
20		1.93E+05	4.63E+05	1.52E+05	3.12E+05	9.66E+05	2.31E+06	7.58E+05	1.56E+06	1.93E+06	4.63E+06	1.52E+06	3.12E+06		
25		1.79E+05	4.28E+05	1.41E+05	2.90E+05	8.96E+05	2.14E+06	7.03E+05	1.45E+06	1.79E+06	4.28E+06	1.41E+06	2.90E+06		
30		1.65E+05	3.94E+05	1.30E+05	2.67E+05	8.27E+05	1.97E+06	6.48E+05	1.33E+06	1.65E+06	3.94E+06	1.30E+06	2.67E+06		

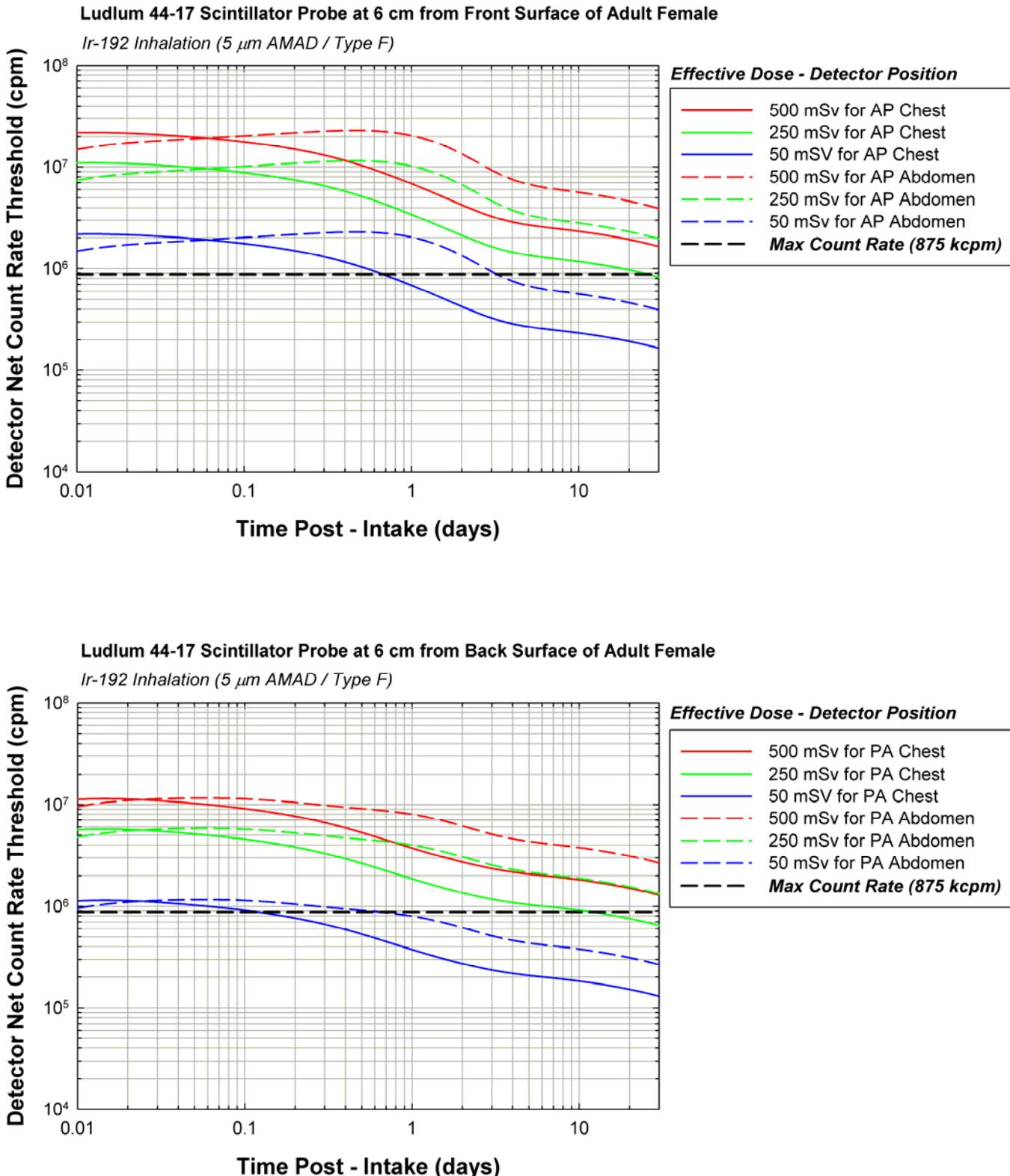
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		7.84E+05	6.08E+05	3.82E+05	3.94E+05	3.92E+06	3.04E+06	1.91E+06	1.97E+06	7.84E+06	6.08E+06	3.82E+06	3.94E+06		
1		7.51E+05	6.18E+05	3.70E+05	3.98E+05	3.76E+06	3.09E+06	1.85E+06	1.99E+06	7.51E+06	6.18E+06	3.70E+06	3.98E+06		
2		7.05E+05	6.22E+05	3.47E+05	3.87E+05	3.53E+06	3.11E+06	1.73E+06	1.94E+06	7.05E+06	6.22E+06	3.47E+06	3.87E+06		
4		6.51E+05	6.25E+05	3.12E+05	3.59E+05	3.25E+06	3.12E+06	1.56E+06	1.79E+06	6.51E+06	6.25E+06	3.12E+06	3.59E+06		
6		6.13E+05	6.22E+05	2.87E+05	3.36E+05	3.06E+06	3.11E+06	1.44E+06	1.68E+06	6.13E+06	6.22E+06	2.87E+06	3.36E+06		
8		5.80E+05	6.14E+05	2.68E+05	3.20E+05	2.90E+06	3.07E+06	1.34E+06	1.60E+06	5.80E+06	6.14E+06	2.68E+06	3.20E+06		
10		5.51E+05	6.04E+05	2.53E+05	3.07E+05	2.76E+06	3.02E+06	1.26E+06	1.53E+06	5.51E+06	6.04E+06	2.53E+06	3.07E+06		
12		5.25E+05	5.91E+05	2.40E+05	2.96E+05	2.63E+06	2.95E+06	1.20E+06	1.48E+06	5.25E+06	5.91E+06	2.40E+06	2.96E+06		
14		5.01E+05	5.76E+05	2.30E+05	2.87E+05	2.51E+06	2.88E+06	1.15E+06	1.44E+06	5.01E+06	5.76E+06	2.30E+06	2.87E+06		
16		4.79E+05	5.60E+05	2.21E+05	2.79E+05	2.40E+06	2.80E+06	1.10E+06	1.40E+06	4.79E+06	5.60E+06	2.21E+06	2.79E+06		
18		4.58E+05	5.44E+05	2.13E+05	2.71E+05	2.29E+06	2.72E+06	1.06E+06	1.36E+06	4.58E+06	5.44E+06	2.13E+06	2.71E+06		
20		4.39E+05	5.27E+05	2.06E+05	2.64E+05	2.19E+06	2.63E+06	1.03E+06	1.32E+06	4.39E+06	5.27E+06	2.06E+06	2.64E+06		
1		4.03E+05	4.93E+05	1.93E+05	2.51E+05	2.02E+06	2.46E+06	9.64E+05	1.25E+06	4.03E+06	4.93E+06	1.93E+06	2.51E+06		
2		2.61E+05	3.26E+05	1.46E+05	1.89E+05	1.31E+06	1.63E+06	7.32E+05	9.46E+05	2.61E+06	3.26E+06	1.46E+06	1.89E+06		
3		1.97E+05	2.40E+05	1.25E+05	1.57E+05	9.85E+05	1.20E+06	6.26E+05	7.87E+05	1.97E+06	2.40E+06	1.25E+06	1.57E+06		
4		1.69E+05	2.03E+05	1.15E+05	1.42E+05	8.45E+05	1.01E+06	5.75E+05	7.11E+05	1.69E+06	2.03E+06	1.15E+06	1.42E+06		
5		1.56E+05	1.85E+05	1.09E+05	1.34E+05	7.80E+05	9.27E+05	5.47E+05	6.71E+05	1.56E+06	1.85E+06	1.09E+06	1.34E+06		
6		1.49E+05	1.76E+05	1.06E+05	1.29E+05	7.45E+05	8.80E+05	5.29E+05	6.47E+05	1.49E+06	1.76E+06	1.06E+06	1.29E+06		
7		1.44E+05	1.70E+05	1.03E+05	1.26E+05	7.21E+05	8.50E+05	5.14E+05	6.28E+05	1.44E+06	1.70E+06	1.03E+06	1.26E+06		
8		1.40E+05	1.65E+05	1.00E+05	1.23E+05	7.02E+05	8.27E+05	5.02E+05	6.13E+05	1.40E+06	1.65E+06	1.00E+06	1.23E+06		
9		1.37E+05	1.61E+05	9.80E+04	1.20E+05	6.85E+05	8.07E+05	4.90E+05	5.98E+05	1.37E+06	1.61E+06	9.80E+05	1.20E+06		
10		1.34E+05	1.58E+05</												

**Table D18 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 5-μm AMAD Aerosol, Type F, f<sub>A</sub> = 0.01 Ludlum 44-17 Scintillator Probe**

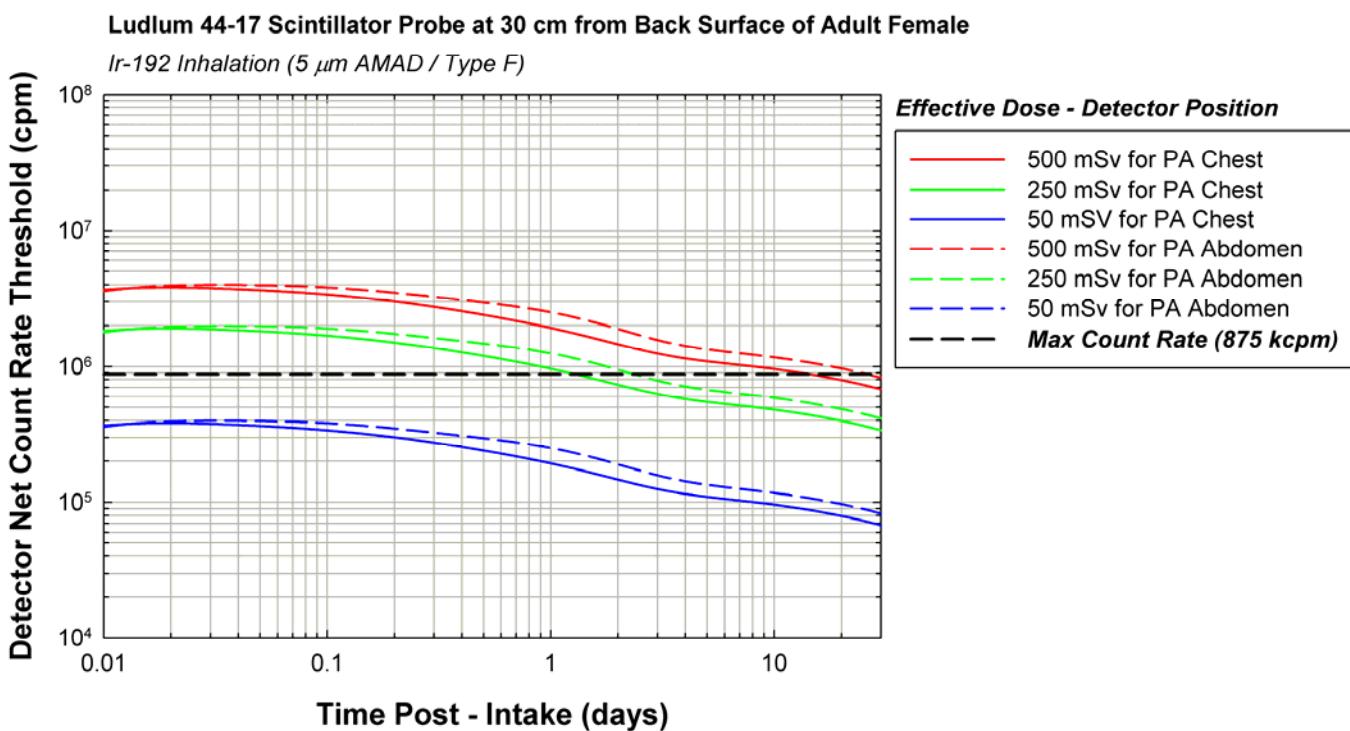
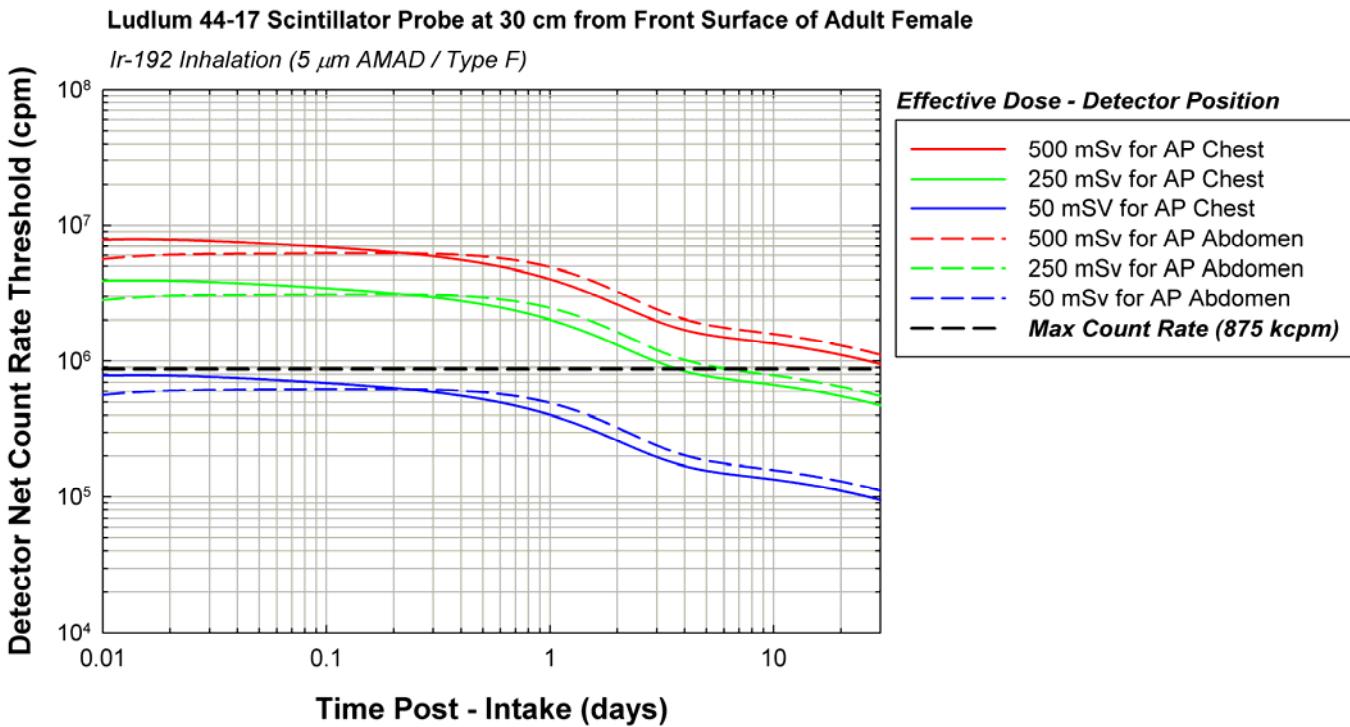
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	1.40E+05	1.22E+05	7.81E+04	7.94E+04	7.01E+05	6.12E+05	3.91E+05	3.97E+05	1.40E+06	1.22E+06	7.81E+05	7.94E+05		
	1	1.39E+05	1.23E+05	7.66E+04	7.95E+04	6.93E+05	6.16E+05	3.83E+05	3.98E+05	1.39E+06	1.23E+06	7.66E+05	7.95E+05		
	2	1.35E+05	1.22E+05	7.32E+04	7.71E+04	6.75E+05	6.12E+05	3.66E+05	3.86E+05	1.35E+06	1.22E+06	7.32E+05	7.71E+05		
	4	1.29E+05	1.19E+05	6.78E+04	7.13E+04	6.47E+05	5.97E+05	3.39E+05	3.57E+05	1.29E+06	1.19E+06	6.78E+05	7.13E+05		
	6	1.24E+05	1.16E+05	6.37E+04	6.66E+04	6.22E+05	5.80E+05	3.18E+05	3.33E+05	1.24E+06	1.16E+06	6.37E+05	6.66E+05		
	8	1.19E+05	1.12E+05	6.05E+04	6.29E+04	5.97E+05	5.62E+05	3.02E+05	3.14E+05	1.19E+06	1.12E+06	6.05E+05	6.29E+05		
	10	1.15E+05	1.09E+05	5.78E+04	5.99E+04	5.74E+05	5.44E+05	2.89E+05	2.99E+05	1.15E+06	1.09E+06	5.78E+05	5.99E+05		
	12	1.10E+05	1.05E+05	5.56E+04	5.74E+04	5.51E+05	5.26E+05	2.78E+05	2.87E+05	1.10E+06	1.05E+06	5.56E+05	5.74E+05		
	14	1.06E+05	1.02E+05	5.36E+04	5.53E+04	5.28E+05	5.08E+05	2.68E+05	2.77E+05	1.06E+06	1.02E+06	5.36E+05	5.53E+05		
	16	1.01E+05	9.81E+04	5.18E+04	5.35E+04	5.07E+05	4.91E+05	2.59E+05	2.67E+05	1.01E+06	9.81E+05	5.18E+05	5.35E+05		
	18	9.73E+04	9.46E+04	5.02E+04	5.17E+04	4.86E+05	4.73E+05	2.51E+05	2.59E+05	9.73E+05	9.46E+05	5.02E+05	5.17E+05		
	20	9.33E+04	9.12E+04	4.87E+04	5.01E+04	4.67E+05	4.56E+05	2.43E+05	2.51E+05	9.33E+05	9.12E+05	4.87E+05	5.01E+05		
1	8.59E+04	8.47E+04	4.59E+04	4.73E+04	4.29E+05	4.24E+05	2.29E+05	2.36E+05	8.59E+05	8.47E+05	4.59E+05	4.73E+05			
2	5.48E+04	5.62E+04	3.47E+04	3.56E+04	2.74E+05	2.81E+05	1.73E+05	1.78E+05	5.48E+05	5.62E+05	3.47E+05	3.56E+05			
3	4.05E+04	4.26E+04	2.93E+04	3.00E+04	2.02E+05	2.13E+05	1.47E+05	1.50E+05	4.05E+05	4.26E+05	2.93E+05	3.00E+05			
4	3.43E+04	3.66E+04	2.68E+04	2.74E+04	1.71E+05	1.83E+05	1.34E+05	1.37E+05	3.43E+05	3.66E+05	2.68E+05	2.74E+05			
5	3.15E+04	3.38E+04	2.55E+04	2.60E+04	1.57E+05	1.69E+05	1.27E+05	1.30E+05	3.15E+05	3.38E+05	2.55E+05	2.60E+05			
6	2.99E+04	3.23E+04	2.46E+04	2.51E+04	1.50E+05	1.61E+05	1.23E+05	1.25E+05	2.99E+05	3.23E+05	2.46E+05	2.51E+05			
7	2.90E+04	3.12E+04	2.39E+04	2.44E+04	1.45E+05	1.56E+05	1.20E+05	1.22E+05	2.90E+05	3.12E+05	2.39E+05	2.44E+05			
8	2.82E+04	3.04E+04	2.33E+04	2.38E+04	1.41E+05	1.52E+05	1.17E+05	1.19E+05	2.82E+05	3.04E+05	2.33E+05	2.38E+05			
9	2.75E+04	2.97E+04	2.28E+04	2.32E+04	1.37E+05	1.48E+05	1.14E+05	1.16E+05	2.75E+05	2.97E+05	2.28E+05	2.32E+05			
10	2.69E+04	2.90E+04	2.23E+04	2.27E+04	1.34E+05	1.45E+05	1.11E+05	1.14E+05	2.69E+05	2.90E+05	2.23E+05	2.27E+05			
15	2.43E+04	2.62E+04	2.02E+04	2.05E+04	1.21E+05	1.31E+05	1.01E+05	1.03E+05	2.43E+05	2.62E+05	2.02E+05	2.05E+05			
20	2.21E+04	2.39E+04	1.84E+04	1.88E+04	1.11E+05	1.20E+05	9.22E+04	9.39E+04	2.21E+05	2.39E+05	1.84E+05	1.88E+05			
25	2.05E+04	2.22E+04	1.71E+04	1.74E+04	1.03E+05	1.11E+05	8.55E+04	8.71E+04	2.05E+05	2.22E+05	1.71E+05	1.74E+05			
30	1.89E+04	2.04E+04	1.58E+04	1.61E+04	9.46E+04	1.02E+05	7.89E+04	8.03E+04	1.89E+05	2.04E+05	1.58E+05	1.61E+05			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	3.72E+04	3.72E+04	2.36E+04	2.36E+04	1.86E+05	1.86E+05	1.18E+05	1.18E+05	3.72E+05	3.72E+05	2.36E+05	2.36E+05		
	1	3.68E+04	3.68E+04	2.34E+04	2.34E+04	1.84E+05	1.84E+05	1.17E+05	1.17E+05	3.68E+05	3.68E+05	2.34E+05	2.34E+05		
	2	3.60E+04	3.60E+04	2.25E+04	2.25E+04	1.80E+05	1.80E+05	1.13E+05	1.13E+05	3.60E+05	3.60E+05	2.25E+05	2.25E+05		
	4	3.49E+04	3.49E+04	2.09E+04	2.09E+04	1.75E+05	1.75E+05	1.04E+05	1.04E+05	3.49E+05	3.49E+05	2.09E+05	2.09E+05		
	6	3.39E+04	3.39E+04	1.96E+04	1.96E+04	1.70E+05	1.70E+05	9.80E+04	9.80E+04	3.39E+05	3.39E+05	1.96E+05	1.96E+05		
	8	3.29E+04	3.29E+04	1.86E+04	1.86E+04	1.65E+05	1.65E+05	9.29E+04	9.29E+04	3.29E+05	3.29E+05	1.86E+05	1.86E+05		
	10	3.19E+04	3.19E+04	1.77E+04	1.77E+04	1.60E+05	1.60E+05	8.87E+04	8.87E+04	3.19E+05	3.19E+05	1.77E+05	1.77E+05		
	12	3.09E+04	3.09E+04	1.70E+04	1.70E+04	1.55E+05	1.55E+05	8.51E+04	8.51E+04	3.09E+05	3.09E+05	1.70E+05	1.70E+05		
	14	2.99E+04	2.99E+04	1.64E+04	1.64E+04	1.49E+05	1.49E+05	8.20E+04	8.20E+04	2.99E+05	2.99E+05	1.64E+05	1.64E+05		
	16	2.89E+04	2.89E+04	1.58E+04	1.58E+04	1.44E+05	1.44E+05	7.92E+04	7.92E+04	2.89E+05	2.89E+05	1.58E+05	1.58E+05		
	18	2.79E+04	2.79E+04	1.53E+04	1.53E+04	1.39E+05	1.39E+05	7.66E+04	7.66E+04	2.79E+05	2.79E+05	1.53E+05	1.53E+05		
	20	2.69E+04	2.69E+04	1.48E+04	1.48E+04	1.34E+05	1.34E+05	7.42E+04	7.42E+04	2.69E+05	2.69E+05	1.48E+05	1.48E+05		
1	2.50E+04	2.50E+04	1.39E+04	1.39E+04	1.25E+05	1.25E+05	6.97E+04	6.97E+04	2.50E+05	2.50E+05	1.39E+05	1.39E+05			
2	1.68E+04	1.68E+04	1.03E+04	1.03E+04	8.39E+04	8.39E+04	5.17E+04	5.17E+04	1.68E+05	1.68E+05	1.03E+05	1.03E+05			
3	1.28E+04	1.28E+04	8.63E+03	8.63E+03	6.42E+04	6.42E+04	4.31E+04	4.31E+04	1.28E+05	1.28E+05	8.63E+04	8.63E+04			
4	1.11E+04	1.11E+04	7.83E+03	7.83E+03	5.55E+04	5.55E+04	3.91E+04	3.91E+04	1.11E+05	1.11E+05	7.83E+04	7.83E+04			
5	1.03E+04	1.03E+04	7.41E+03	7.41E+03	5.14E+04	5.14E+04	3.71E+04	3.71E+04	1.03E+05	1.03E+05	7.41E+04	7.41E+04			
6	9.82E+03	9.82E+03	7.15E+03	7.15E+03	4.91E+04	4.91E+04	3.57E+04	3.57E+04	9.82E+04	9.82E+04	7.15E+04	7.15E+04			
7	9.51E+03	9.51E+03	6.95E+03	6.95E+03	4.75E+04	4.75E+04	3.47E+04	3.47E+04	9.51E+04	9.51E+04	6.95E+04	6.95E+04			
8	9.26E+03	9.26E+03	6.77E+03	6.77E+03	4.63E+04	4.63E+04	3.39E+04	3.39E+04	9.26E+04	9.26E+04	6.77E+04	6.77E+04			
9	9.04E+03	9.04E+03	6.62E+03	6.62E+03	4.52E+04	4.52E+04	3.31E+04	3.31E+04	9.04E+04	9.04E+04	6.62E+04	6.62E+04			
10	8.83E+03	8.83E+03	6.47E+03	6.47E+03	4.42E+04	4.42E+04	3.24E+04	3.24E+04	8.83E+						

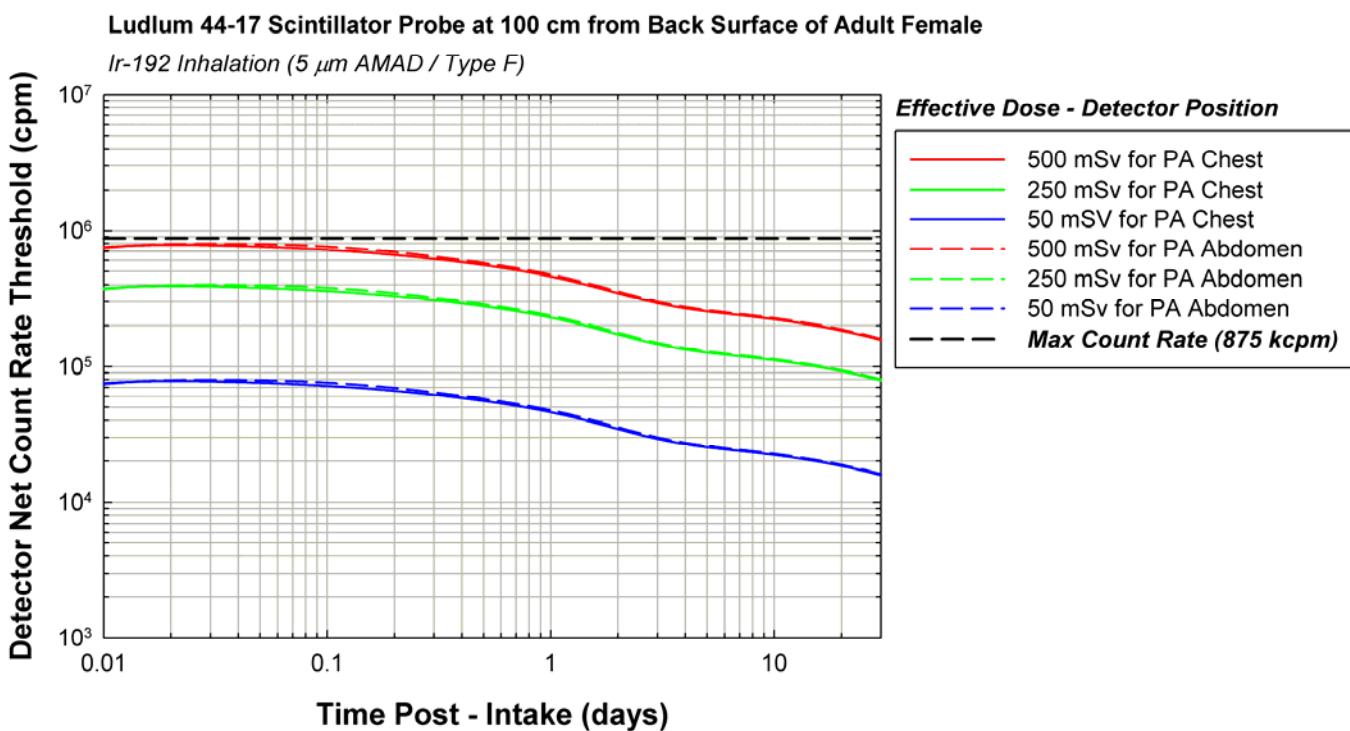
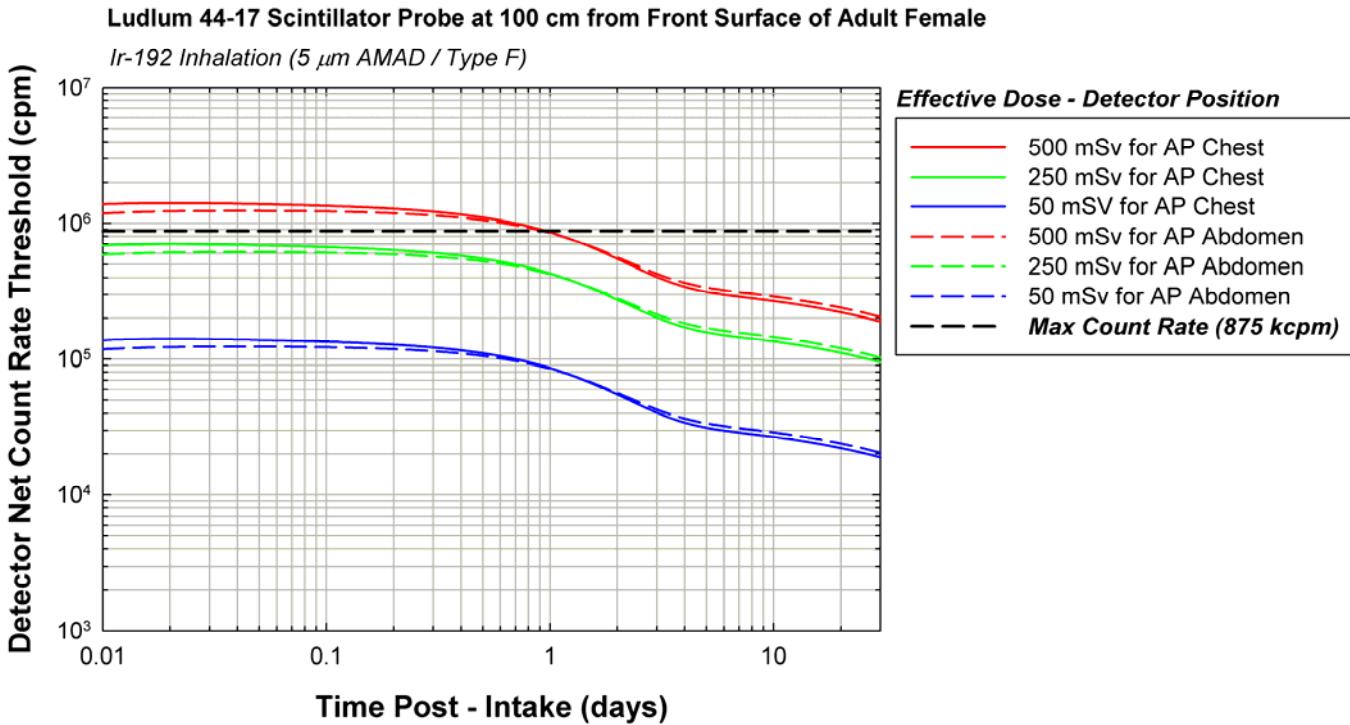
**Table D18 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 5- $\mu$ m AMAD Aerosol, Type F,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



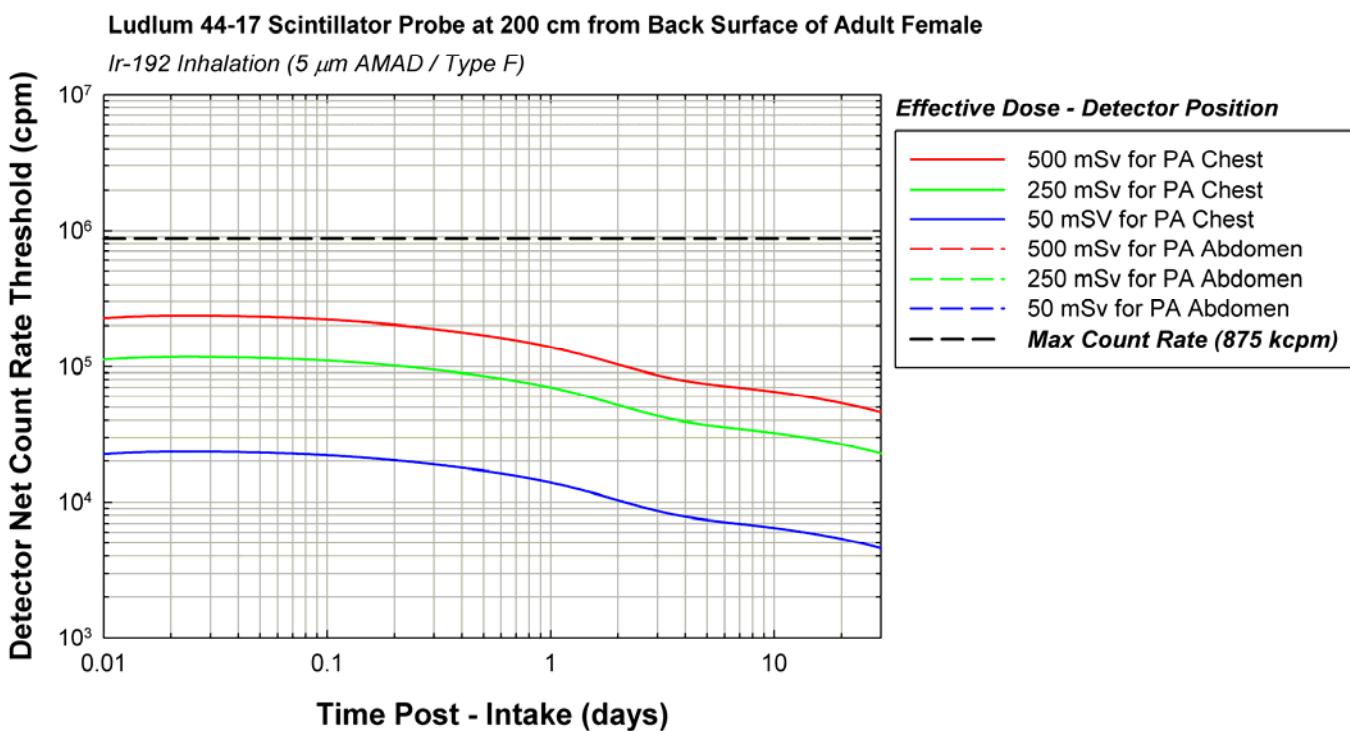
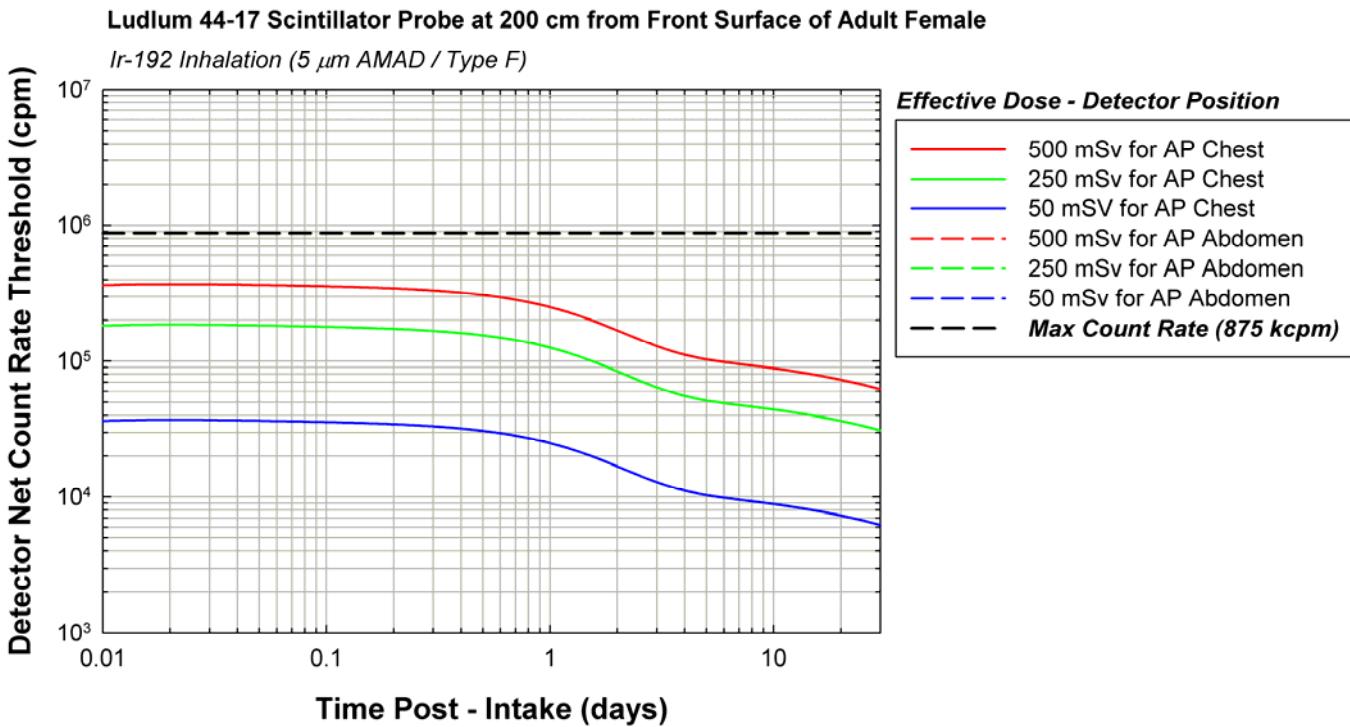
**Table D18 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 5-μm AMAD Aerosol, Type F,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D18 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 5- $\mu$ m AMAD Aerosol, Type F,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D18 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 5-μm AMAD Aerosol, Type F,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D19 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iridium-192, Inhalation, 5-μm AMAD Aerosol, Type M, f<sub>A</sub> = 0.01 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		9.69E+05	9.83E+05	5.15E+05	6.25E+05	4.84E+06	4.92E+06	2.58E+06	3.13E+06	9.69E+06	9.83E+06	5.15E+06	6.25E+06		
1		8.84E+05	1.16E+06	4.85E+05	7.18E+05	4.42E+06	5.80E+06	2.43E+06	3.59E+06	8.84E+06	1.16E+07	4.85E+06	7.18E+06		
2		7.72E+05	1.30E+06	4.23E+05	7.30E+05	3.86E+06	6.49E+06	2.12E+06	3.65E+06	7.72E+06	1.30E+07	4.23E+06	7.30E+06		
4		6.79E+05	1.44E+06	3.65E+05	6.55E+05	3.39E+06	7.19E+06	1.83E+06	3.27E+06	6.79E+06	1.44E+07	3.65E+06	6.55E+06		
6		6.34E+05	1.52E+06	3.37E+05	5.85E+05	3.17E+06	7.58E+06	1.69E+06	2.93E+06	6.34E+06	1.52E+07	3.37E+06	5.85E+06		
8		6.02E+05	1.56E+06	3.19E+05	5.38E+05	3.01E+06	7.79E+06	1.60E+06	2.69E+06	6.02E+06	1.56E+07	3.19E+06	5.38E+06		
10		5.75E+05	1.58E+06	3.06E+05	5.04E+05	2.88E+06	7.89E+06	1.53E+06	2.52E+06	5.75E+06	1.58E+07	3.06E+06	5.04E+06		
12		5.51E+05	1.58E+06	2.95E+05	4.79E+05	2.76E+06	7.88E+06	1.48E+06	2.39E+06	5.51E+06	1.58E+07	2.95E+06	4.79E+06		
14		5.29E+05	1.56E+06	2.86E+05	4.59E+05	2.65E+06	7.78E+06	1.43E+06	2.29E+06	5.29E+06	1.56E+07	2.86E+06	4.59E+06		
16		5.09E+05	1.53E+06	2.78E+05	4.40E+05	2.55E+06	7.63E+06	1.39E+06	2.20E+06	5.09E+06	1.53E+07	2.78E+06	4.40E+06		
18		4.90E+05	1.49E+06	2.71E+05	4.23E+05	2.45E+06	7.43E+06	1.35E+06	2.12E+06	4.90E+06	1.49E+07	2.71E+06	4.23E+06		
20		4.72E+05	1.44E+06	2.64E+05	4.07E+05	2.36E+06	7.20E+06	1.32E+06	2.03E+06	4.72E+06	1.44E+07	2.64E+06	4.07E+06		
1		4.38E+05	1.33E+06	2.51E+05	3.74E+05	2.19E+06	6.66E+06	1.26E+06	1.87E+06	4.38E+06	1.33E+07	2.51E+06	3.74E+06		
2		2.98E+05	6.82E+05	1.96E+05	2.09E+05	1.49E+06	3.41E+06	9.82E+05	1.04E+06	2.98E+06	6.82E+06	1.96E+06	2.09E+06		
3		2.33E+05	3.23E+05	1.69E+05	1.22E+05	1.17E+06	1.61E+06	8.45E+05	6.09E+05	2.33E+06	3.23E+06	1.69E+06	1.22E+06		
4		2.05E+05	1.70E+05	1.56E+05	8.47E+04	1.02E+06	8.49E+05	7.78E+05	4.24E+05	2.05E+06	1.70E+06	1.56E+06	8.47E+05		
5		1.91E+05	1.10E+05	1.49E+05	6.97E+04	9.57E+05	5.49E+05	7.43E+05	3.48E+05	1.91E+06	1.10E+06	1.49E+06	6.97E+05		
6		1.84E+05	8.64E+04	1.44E+05	6.33E+04	9.19E+05	4.32E+05	7.19E+05	3.17E+05	1.84E+06	8.64E+05	1.44E+06	6.33E+05		
7		1.78E+05	7.68E+04	1.40E+05	6.02E+04	8.92E+05	3.84E+05	7.00E+05	3.01E+05	1.78E+06	7.68E+05	1.40E+06	6.02E+05		
8		1.74E+05	7.25E+04	1.37E+05	5.84E+04	8.69E+05	3.62E+05	6.84E+05	2.92E+05	1.74E+06	7.25E+05	1.37E+06	5.84E+05		
9		1.70E+05	7.00E+04	1.34E+05	5.71E+04	8.49E+05	3.50E+05	6.68E+05	2.85E+05	1.70E+06	7.00E+05	1.34E+06	5.71E+05		
10		1.66E+05	6.84E+04	1.31E+05	5.59E+04	8.30E+05	3.42E+05	6.53E+05	2.80E+05	1.66E+06	6.84E+05	1.31E+06	5.59E+05		
15		1.50E+05	6.30E+04	1.18E+05	5.15E+04	7.50E+05	3.15E+05	5.90E+05	2.57E+05	1.50E+06	6.30E+05	1.18E+06	5.15E+05		
20		1.34E+05	5.76E+04	1.05E+05	4.70E+04	6.69E+05	2.88E+05	5.27E+05	2.35E+05	1.34E+06	5.76E+05	1.05E+06	4.70E+05		
25		1.22E+05	5.37E+04	9.57E+04	4.37E+04	6.08E+05	2.69E+05	4.79E+05	2.19E+05	1.22E+06	5.37E+05	9.57E+05	4.37E+05		
30		1.09E+05	4.98E+04	8.61E+04	4.04E+04	5.47E+05	2.49E+05	4.31E+05	2.02E+05	1.09E+06	4.98E+05	8.61E+05	4.04E+05		

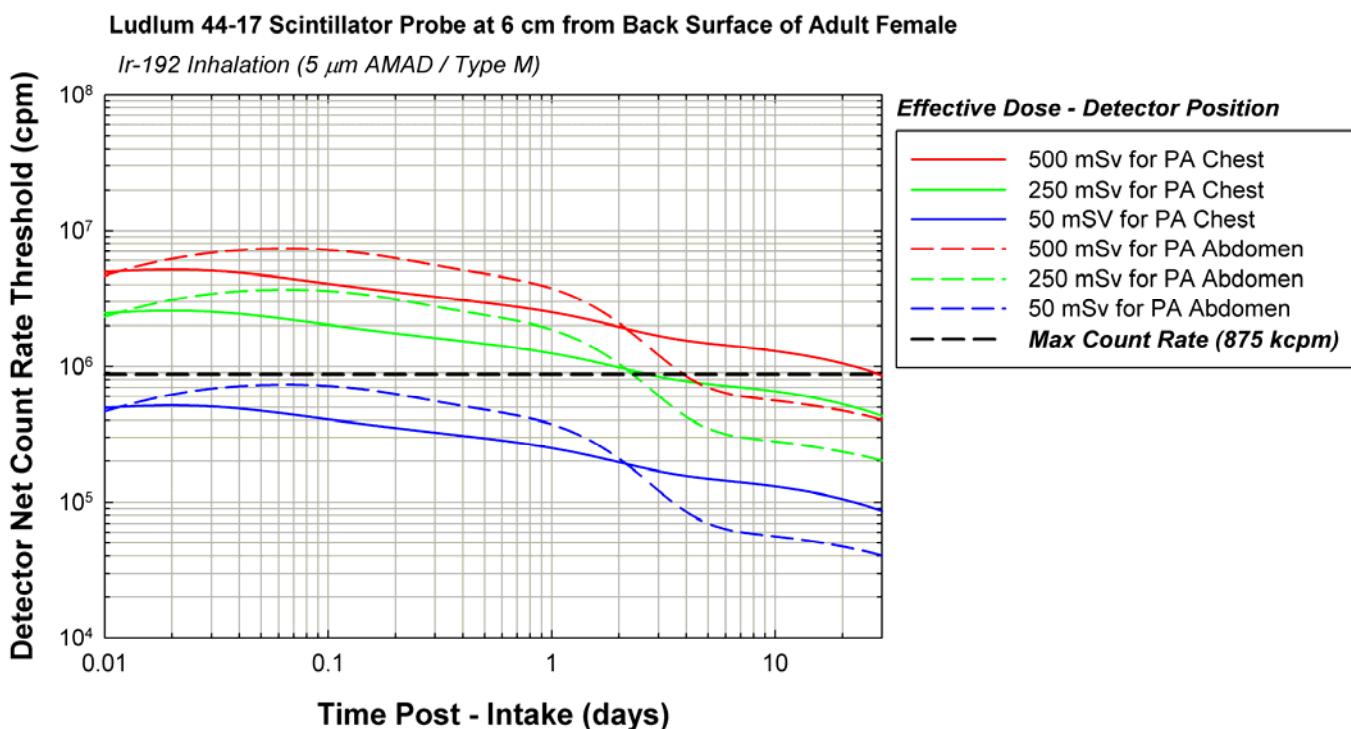
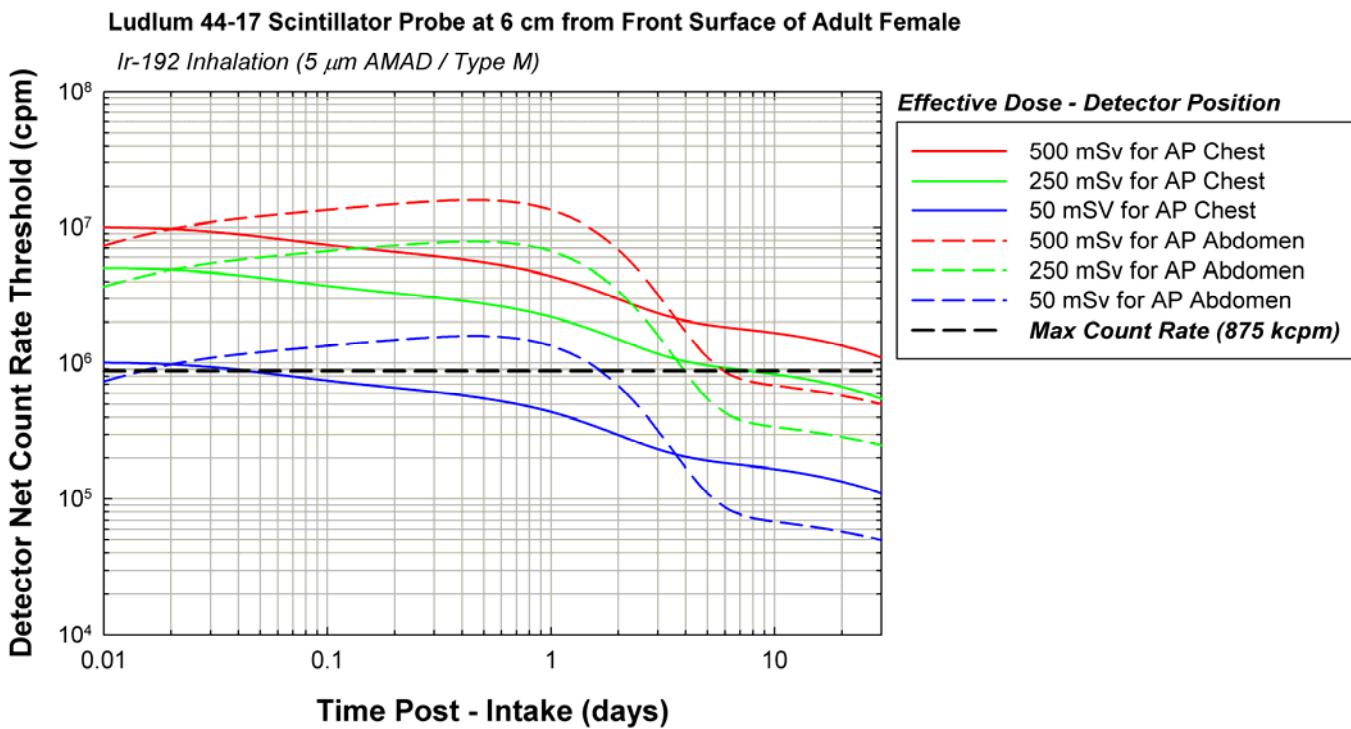
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		4.09E+05	3.34E+05	1.86E+05	2.07E+05	2.05E+06	1.67E+06	9.31E+05	1.03E+06	4.09E+06	3.34E+06	1.86E+06	2.07E+06		
1		3.91E+05	3.57E+05	1.87E+05	2.24E+05	1.96E+06	1.79E+06	9.34E+05	1.12E+06	3.91E+06	3.57E+06	1.87E+06	2.24E+06		
2		3.60E+05	3.68E+05	1.73E+05	2.21E+05	1.80E+06	1.84E+06	8.64E+05	1.11E+06	3.60E+06	3.68E+06	1.73E+06	2.21E+06		
4		3.34E+05	3.79E+05	1.53E+05	2.01E+05	1.67E+06	1.90E+06	7.66E+05	1.00E+06	3.34E+06	3.79E+06	1.53E+06	2.01E+06		
6		3.21E+05	3.84E+05	1.41E+05	1.85E+05	1.61E+06	1.92E+06	7.03E+05	9.23E+05	3.21E+06	3.84E+06	1.41E+06	1.85E+06		
8		3.10E+05	3.84E+05	1.32E+05	1.73E+05	1.55E+06	1.92E+06	6.60E+05	8.65E+05	3.10E+06	3.84E+06	1.32E+06	1.73E+06		
10		3.00E+05	3.79E+05	1.26E+05	1.64E+05	1.50E+06	1.90E+06	6.28E+05	8.22E+05	3.00E+06	3.79E+06	1.26E+06	1.64E+06		
12		2.90E+05	3.72E+05	1.20E+05	1.58E+05	1.45E+06	1.86E+06	6.01E+05	7.88E+05	2.90E+06	3.72E+06	1.20E+06	1.58E+06		
14		2.79E+05	3.61E+05	1.16E+05	1.52E+05	1.40E+06	1.81E+06	5.79E+05	7.59E+05	2.79E+06	3.61E+06	1.16E+06	1.52E+06		
16		2.69E+05	3.50E+05	1.12E+05	1.46E+05	1.34E+06	1.75E+06	5.58E+05	7.32E+05	2.69E+06	3.50E+06	1.12E+06	1.46E+06		
18		2.58E+05	3.37E+05	1.08E+05	1.41E+05	1.29E+06	1.69E+06	5.39E+05	7.05E+05	2.58E+06	3.37E+06	1.08E+06	1.41E+06		
20		2.47E+05	3.24E+05	1.04E+05	1.36E+05	1.24E+06	1.62E+06	5.20E+05	6.80E+05	2.47E+06	3.24E+06	1.04E+06	1.36E+06		
1		2.26E+05	2.96E+05	9.70E+04	1.26E+05	1.13E+06	1.48E+06	4.85E+05	6.28E+05	2.26E+06	2.96E+06	9.70E+05	1.26E+06		
2		1.28E+05	1.53E+05	6.51E+04	7.50E+04	6.40E+05	7.66E+05	3.25E+05	3.75E+05	1.28E+06	1.53E+06	6.51E+05	7.50E+05		
3		8.02E+04	8.04E+04	4.92E+04	4.87E+04	4.01E+05	4.02E+05	2.46E+05	2.44E+05	8.02E+05	8.04E+05	4.92E+05	4.87E+05		
4		6.01E+04	4.99E+04	4.22E+04	3.75E+04	3.00E+05	2.50E+05	2.11E+05	1.87E+05	6.01E+05	4.99E+05	4.22E+05	3.75E+05		
5		5.17E+04	3.79E+04	3.90E+04	3.27E+04	2.59E+05	1.89E+05	1.95E+05	1.64E+05	5.17E+05	3.79E+05	3.90E+05	3.27E+05		
6		4.80E+04	3.29E+04	3.73E+04	3.05E+04	2.40E+05	1.65E+05	1.87E+05	1.53E+05	4.80E+05	3.29E+05	3.73E+05	3.05E+05		
7		4.60E+04	3.07E+04	3.62E+04	2.94E+04	2.30E+05	1.54E+05	1.81E+05	1.47E+05	4.60E+05	3.07E+05	3.62E+05	2.94E+05		
8		4.47E+04	2.96E+04	3.53E+04	2.86E+04	2.23E+05	1.48E+05	1.76E+05	1.43E+05	4.47E+05	2.96E+05	3.53E+05	2.86E+05		
9		4.36E+04	2.88E+04	3.45E+04	2.79E+04	2.18E+05	1.44E+05	1.72E+05	1.39E+05	4.36E+05	2.88E+05	3.45E+05	2.79E+05		
10		4.26E+04	2.81E+04</												

**Table D19 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iridium-192, Inhalation, 5-μm AMAD Aerosol, Type M, f<sub>A</sub> = 0.01 Ludlum 44-17 Scintillator Probe**

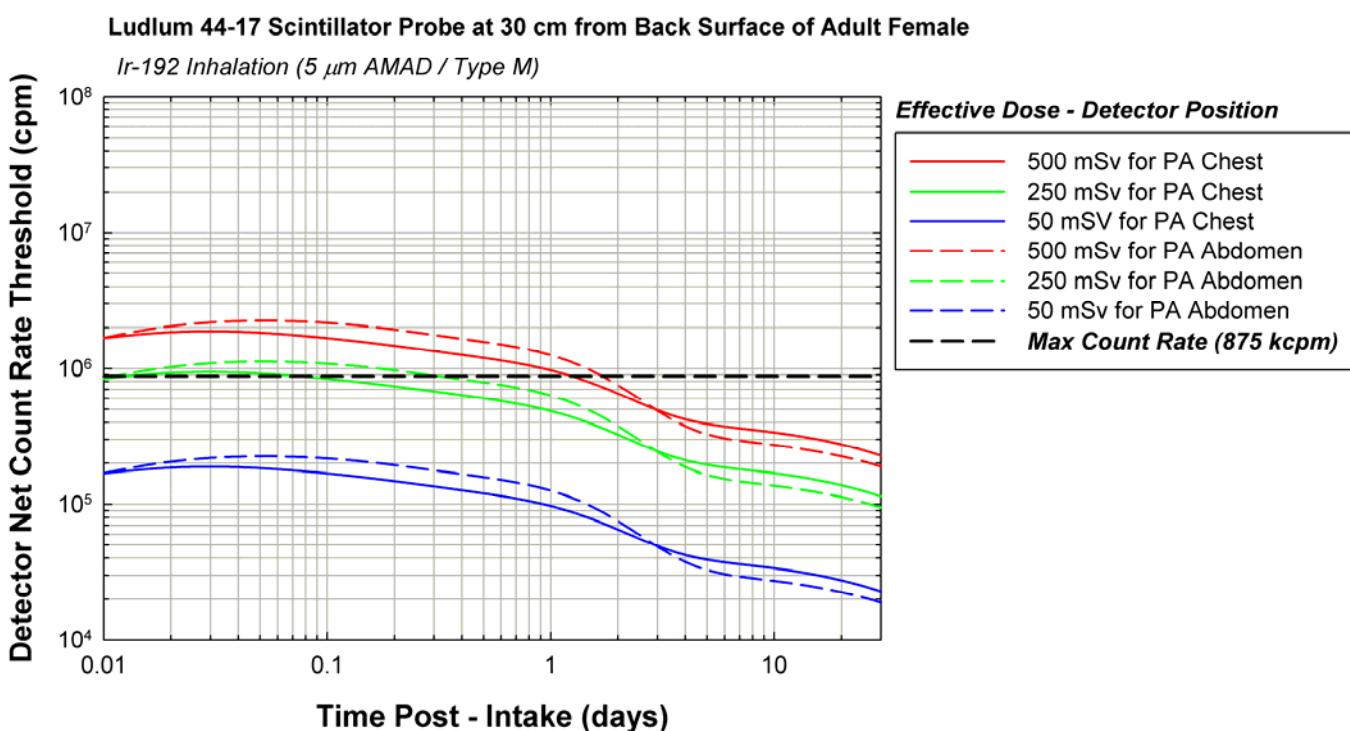
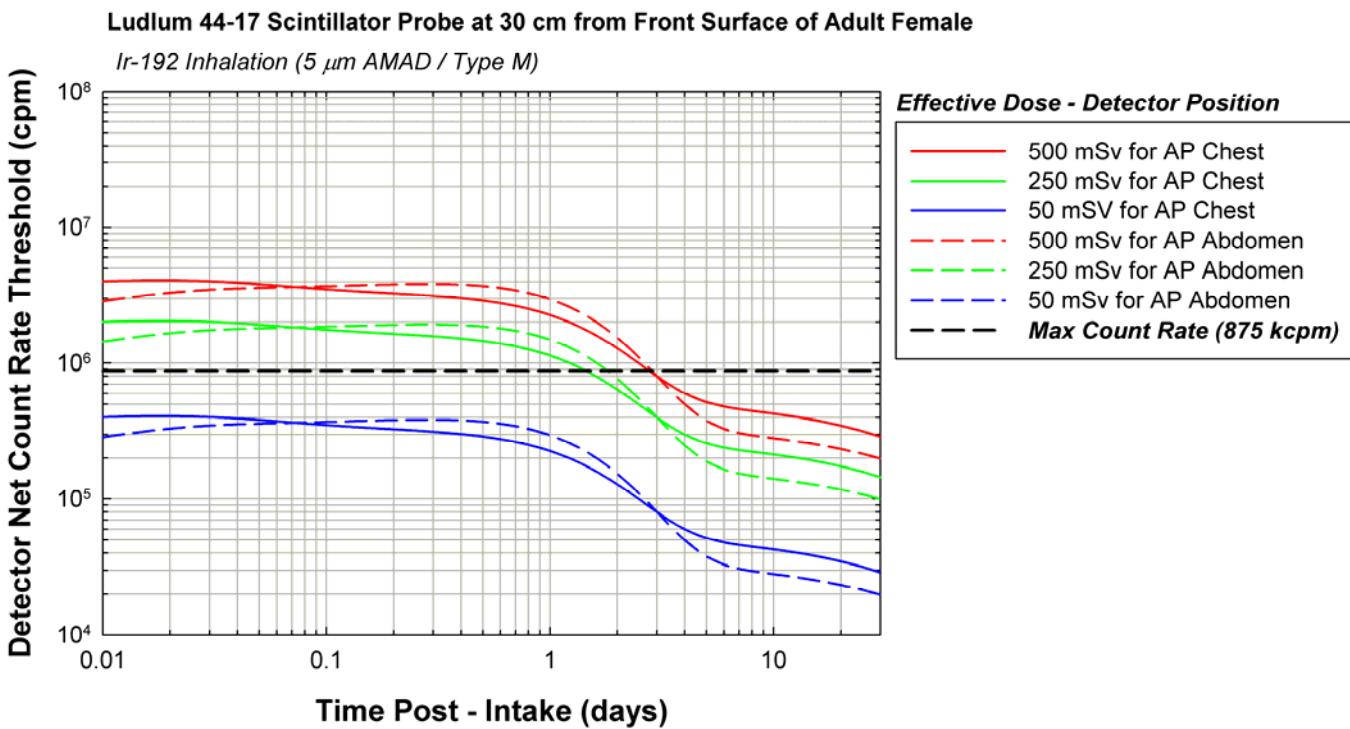
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	7.43E+04	6.47E+04	4.16E+04	4.08E+04	3.72E+05	3.23E+05	2.08E+05	2.04E+05	7.43E+05	6.47E+05	4.16E+05	4.08E+05		
	1	7.49E+04	6.73E+04	4.21E+04	4.33E+04	3.74E+05	3.37E+05	2.11E+05	2.17E+05	7.49E+05	6.73E+05	4.21E+05	4.33E+05		
	2	7.36E+04	6.84E+04	3.98E+04	4.25E+04	3.68E+05	3.42E+05	1.99E+05	2.13E+05	7.36E+05	6.84E+05	3.98E+05	4.25E+05		
	4	7.21E+04	6.83E+04	3.60E+04	3.88E+04	3.61E+05	3.41E+05	1.80E+05	1.94E+05	7.21E+05	6.83E+05	3.60E+05	3.88E+05		
	6	7.07E+04	6.73E+04	3.33E+04	3.56E+04	3.54E+05	3.37E+05	1.67E+05	1.78E+05	7.07E+05	6.73E+05	3.33E+05	3.56E+05		
	8	6.90E+04	6.59E+04	3.13E+04	3.33E+04	3.45E+05	3.30E+05	1.57E+05	1.66E+05	6.90E+05	6.59E+05	3.13E+05	3.33E+05		
	10	6.70E+04	6.42E+04	2.97E+04	3.15E+04	3.35E+05	3.21E+05	1.49E+05	1.57E+05	6.70E+05	6.42E+05	2.97E+05	3.15E+05		
	12	6.48E+04	6.22E+04	2.84E+04	3.00E+04	3.24E+05	3.11E+05	1.42E+05	1.50E+05	6.48E+05	6.22E+05	2.84E+05	3.00E+05		
	14	6.23E+04	6.00E+04	2.72E+04	2.87E+04	3.12E+05	3.00E+05	1.36E+05	1.44E+05	6.23E+05	6.00E+05	2.72E+05	2.87E+05		
	16	5.98E+04	5.77E+04	2.61E+04	2.75E+04	2.99E+05	2.88E+05	1.31E+05	1.38E+05	5.98E+05	5.77E+05	2.61E+05	2.75E+05		
	18	5.73E+04	5.53E+04	2.51E+04	2.64E+04	2.87E+05	2.77E+05	1.25E+05	1.32E+05	5.73E+05	5.53E+05	2.51E+05	2.64E+05		
	20	5.48E+04	5.29E+04	2.40E+04	2.54E+04	2.74E+05	2.65E+05	1.20E+05	1.27E+05	5.48E+05	5.29E+05	2.40E+05	2.54E+05		
1	4.97E+04	4.81E+04	2.21E+04	2.34E+04	2.48E+05	2.41E+05	1.11E+05	1.17E+05	4.97E+05	4.81E+05	2.21E+05	2.34E+05			
2	2.64E+04	2.56E+04	1.36E+04	1.43E+04	1.32E+05	1.28E+05	6.81E+04	7.17E+04	2.64E+05	2.56E+05	1.36E+05	1.43E+05			
3	1.52E+04	1.46E+04	9.55E+03	9.94E+03	7.59E+04	7.29E+04	4.78E+04	4.97E+04	1.52E+05	1.46E+05	9.55E+04	9.94E+04			
4	1.06E+04	1.00E+04	7.82E+03	8.07E+03	5.28E+04	5.01E+04	3.91E+04	4.03E+04	1.06E+05	1.00E+05	7.82E+04	8.07E+04			
5	8.68E+03	8.19E+03	7.07E+03	7.26E+03	4.34E+04	4.10E+04	3.53E+04	3.63E+04	8.68E+04	8.19E+04	7.07E+04	7.26E+04			
6	7.89E+03	7.42E+03	6.70E+03	6.87E+03	3.94E+04	3.71E+04	3.35E+04	3.43E+04	7.89E+04	7.42E+04	6.70E+04	6.87E+04			
7	7.49E+03	7.04E+03	6.48E+03	6.63E+03	3.75E+04	3.52E+04	3.24E+04	3.32E+04	7.49E+04	7.04E+04	6.48E+04	6.63E+04			
8	7.25E+03	6.81E+03	6.31E+03	6.46E+03	3.63E+04	3.41E+04	3.16E+04	3.23E+04	7.25E+04	6.81E+04	6.31E+04	6.46E+04			
9	7.07E+03	6.64E+03	6.17E+03	6.31E+03	3.54E+04	3.32E+04	3.08E+04	3.16E+04	7.07E+04	6.64E+04	6.17E+04	6.31E+04			
10	6.92E+03	6.50E+03	6.04E+03	6.18E+03	3.46E+04	3.25E+04	3.02E+04	3.09E+04	6.92E+04	6.50E+04	6.04E+04	6.18E+04			
15	6.25E+03	5.88E+03	5.46E+03	5.59E+03	3.13E+04	2.94E+04	2.73E+04	2.79E+04	6.25E+04	5.88E+04	5.46E+04	5.59E+04			
20	5.68E+03	5.36E+03	4.96E+03	5.08E+03	2.84E+04	2.68E+04	2.48E+04	2.54E+04	5.68E+04	5.36E+04	4.96E+04	5.08E+04			
25	5.21E+03	4.93E+03	4.55E+03	4.66E+03	2.61E+04	2.47E+04	2.28E+04	2.33E+04	5.21E+04	4.93E+04	4.55E+04	4.66E+04			
30	4.75E+03	4.51E+03	4.15E+03	4.24E+03	2.37E+04	2.25E+04	2.07E+04	2.12E+04	4.75E+04	4.51E+04	4.15E+04	4.24E+04			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm )															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	2.04E+04	2.04E+04	1.24E+04	1.24E+04	1.02E+05	1.02E+05	6.21E+04	6.21E+04	2.04E+05	2.04E+05	1.24E+05	1.24E+05		
	1	2.05E+04	2.05E+04	1.27E+04	1.27E+04	1.03E+05	1.03E+05	6.37E+04	6.37E+04	2.05E+05	2.05E+05	1.27E+05	1.27E+05		
	2	2.01E+04	2.01E+04	1.23E+04	1.23E+04	1.01E+05	1.01E+05	6.13E+04	6.13E+04	2.01E+05	2.01E+05	1.23E+05	1.23E+05		
	4	1.97E+04	1.97E+04	1.12E+04	1.12E+04	9.85E+04	9.85E+04	5.58E+04	5.58E+04	1.97E+05	1.97E+05	1.12E+05	1.12E+05		
	6	1.93E+04	1.93E+04	1.03E+04	1.03E+04	9.65E+04	9.65E+04	5.16E+04	5.16E+04	1.93E+05	1.93E+05	1.03E+05	1.03E+05		
	8	1.89E+04	1.89E+04	9.69E+03	9.69E+03	9.43E+04	9.43E+04	4.85E+04	4.85E+04	1.89E+05	1.89E+05	9.69E+04	9.69E+04		
	10	1.83E+04	1.83E+04	9.19E+03	9.19E+03	9.17E+04	9.17E+04	4.59E+04	4.59E+04	1.83E+05	1.83E+05	9.19E+04	9.19E+04		
	12	1.78E+04	1.78E+04	8.76E+03	8.76E+03	8.88E+04	8.88E+04	4.38E+04	4.38E+04	1.78E+05	1.78E+05	8.76E+04	8.76E+04		
	14	1.71E+04	1.71E+04	8.39E+03	8.39E+03	8.57E+04	8.57E+04	4.19E+04	4.19E+04	1.71E+05	1.71E+05	8.39E+04	8.39E+04		
	16	1.65E+04	1.65E+04	8.04E+03	8.04E+03	8.24E+04	8.24E+04	4.02E+04	4.02E+04	1.65E+05	1.65E+05	8.04E+04	8.04E+04		
	18	1.58E+04	1.58E+04	7.70E+03	7.70E+03	7.91E+04	7.91E+04	3.85E+04	3.85E+04	1.58E+05	1.58E+05	7.70E+04	7.70E+04		
	20	1.51E+04	1.51E+04	7.38E+03	7.38E+03	7.57E+04	7.57E+04	3.69E+04	3.69E+04	1.51E+05	1.51E+05	7.38E+04	7.38E+04		
1	1.38E+04	1.38E+04	6.77E+03	6.77E+03	6.90E+04	6.90E+04	3.38E+04	3.38E+04	1.38E+05	1.38E+05	6.77E+04	6.77E+04			
2	7.43E+03	7.43E+03	4.03E+03	4.03E+03	3.71E+04	3.71E+04	2.01E+04	2.01E+04	7.43E+04	7.43E+04	4.03E+04	4.03E+04			
3	4.33E+03	4.33E+03	2.71E+03	2.71E+03	2.16E+04	2.16E+04	1.35E+04	1.35E+04	4.33E+04	4.33E+04	2.71E+04	2.71E+04			
4	3.04E+03	3.04E+03	2.15E+03	2.15E+03	1.52E+04	1.52E+04	1.08E+04	1.08E+04	3.04E+04	3.04E+04	2.15E+04	2.15E+04			
5	2.52E+03	2.52E+03	1.91E+03	1.91E+03	1.26E+04	1.26E+04	9.57E+03	9.57E+03	2.52E+04	2.52E+04	1.91E+04	1.91E+04			
6	2.29E+03	2.29E+03	1.80E+03	1.80E+03	1.15E+04	1.15E+04	9.01E+03	9.01E+03	2.29E+04	2.29E+04	1.80E+04	1.80E+04			
7	2.18E+03	2.18E+03	1.74E+03	1.74E+03	1.09E+04	1.09E+04	8.69E+03	8.69E+03	2.18E+04	2.18E+04	1.74E+04	1.74E+04			
8	2.11E+03	2.11E+03	1.69E+03	1.69E+03	1.06E+04	1.06E+04	8.46E+03	8.46E+03	2.11E+04	2.11E+04	1.69E+04	1.69E+04			
9	2.06E+03	2.06E+03	1.65E+03	1.65E+03	1.03E+04	1.03E+04	8.27E+03	8.27E+03	2.06E+04	2.06E+04	1.65E+04	1.65E+04			
10	2.02E+03	2.02E+03	1.62E+03	1.62E+03	1.01E+04	1.01E+04	8.10E+03	8.10E+03	2.02E+						

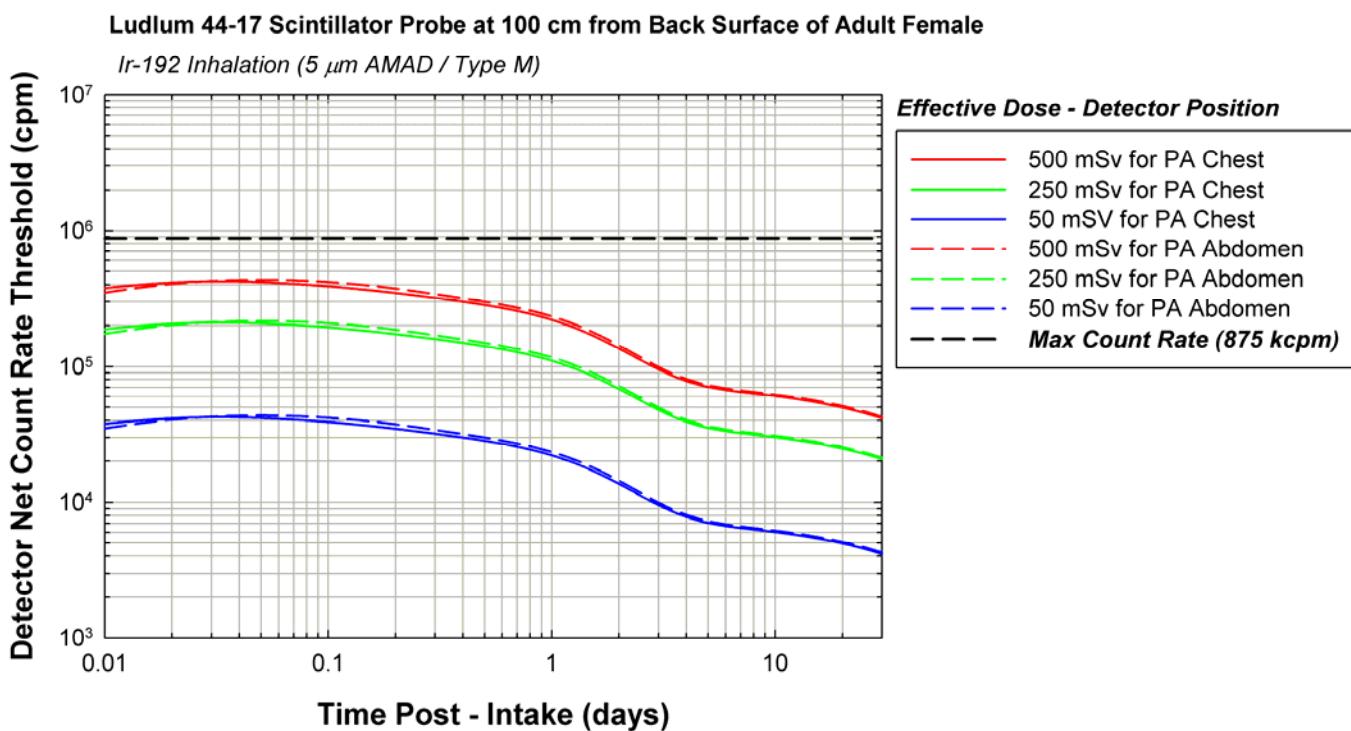
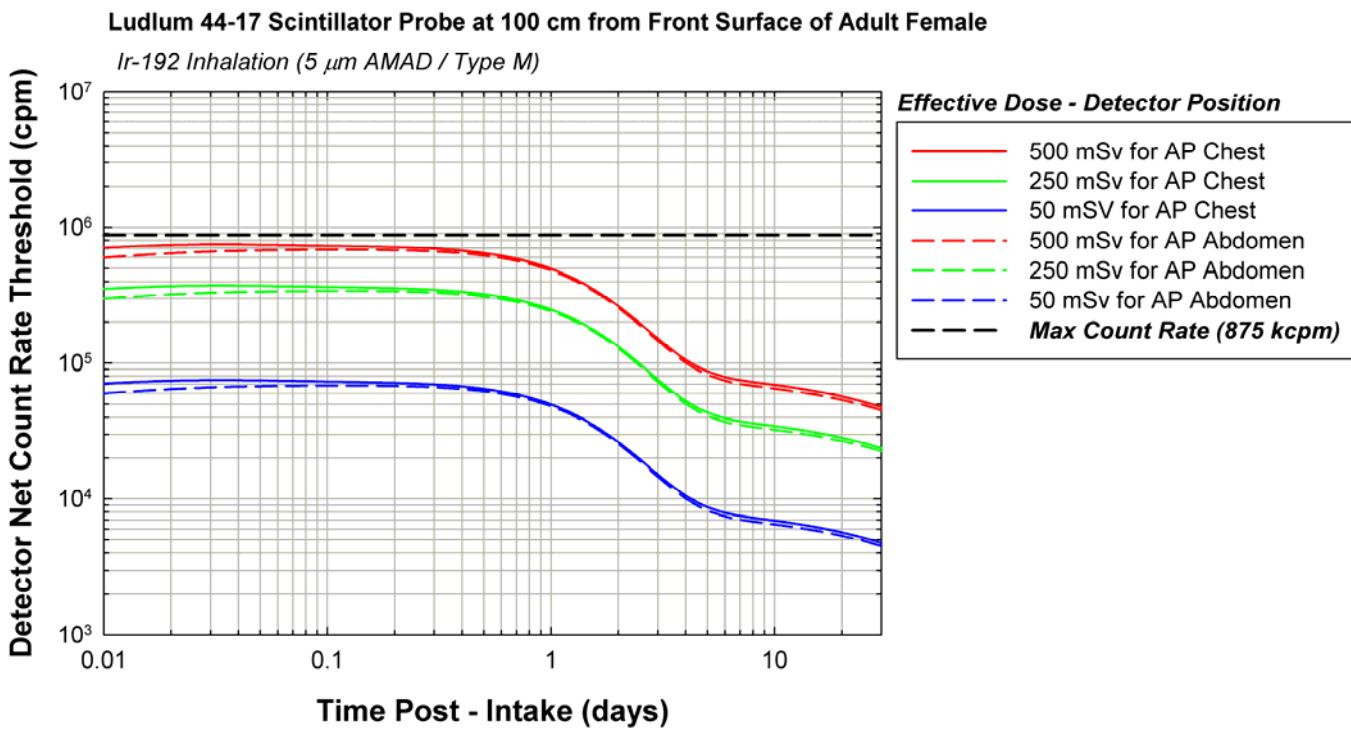
**Table D19 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 5-μm AMAD Aerosol, Type M,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



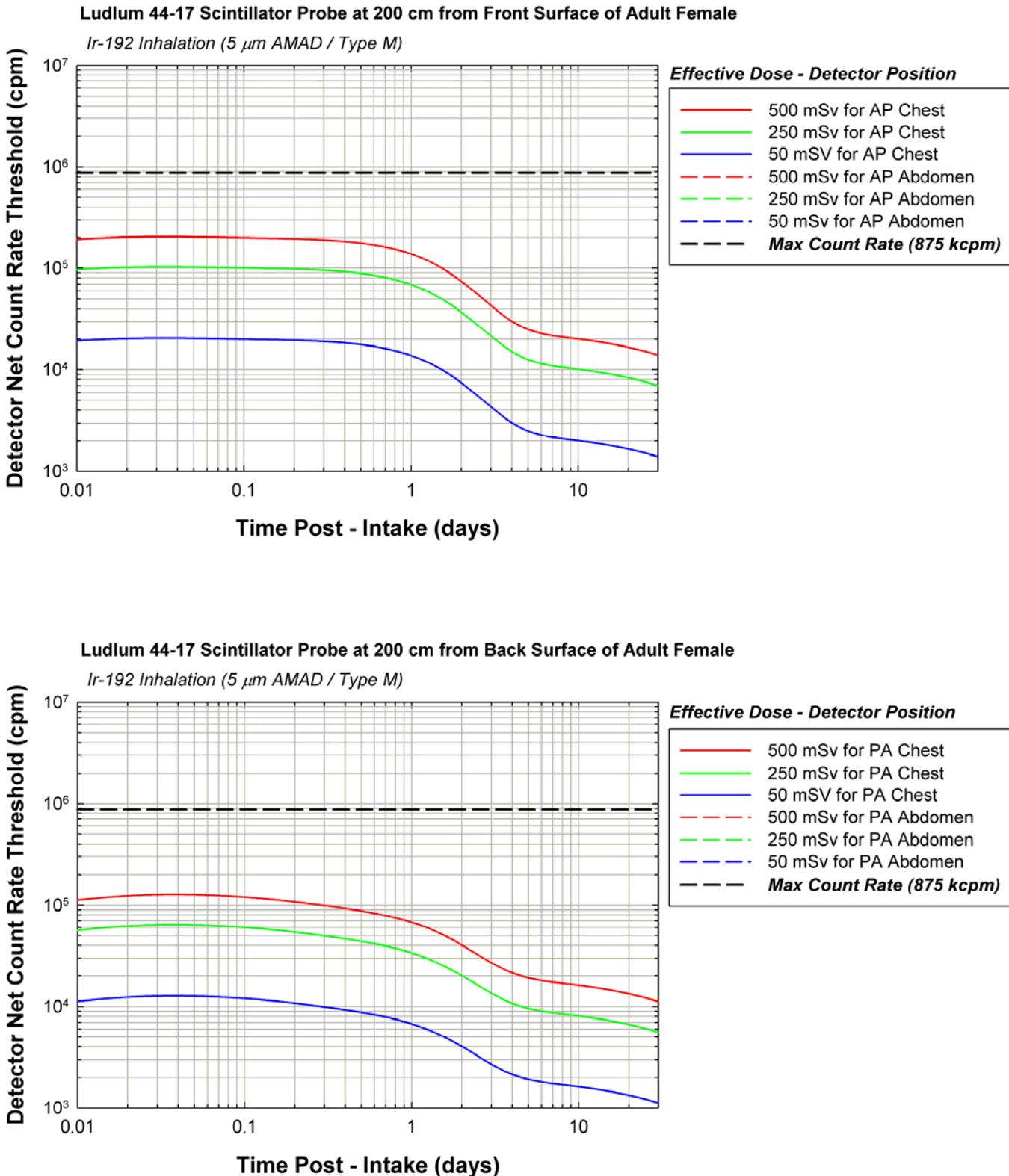
**Table D19 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 5-μm AMAD Aerosol, Type M,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D19 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 5-μm AMAD Aerosol, Type M,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D19 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 5- $\mu$ m AMAD Aerosol, Type M,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D20 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iridium-192, Inhalation, 5-μm AMAD Aerosol, Type S, f<sub>A</sub> = 0.01 Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		7.93E+05	8.28E+05	4.23E+05	5.26E+05	3.97E+06	4.14E+06	2.11E+06	2.63E+06	7.93E+06	8.28E+06	4.23E+06	5.26E+06		
1		7.21E+05	9.86E+05	3.99E+05	6.10E+05	3.61E+06	4.93E+06	1.99E+06	3.05E+06	7.21E+06	9.86E+06	3.99E+06	6.10E+06		
2		6.27E+05	1.11E+06	3.46E+05	6.21E+05	3.14E+06	5.54E+06	1.73E+06	3.10E+06	6.27E+06	1.11E+07	3.46E+06	6.21E+06		
4		5.53E+05	1.23E+06	2.99E+05	5.55E+05	2.76E+06	6.15E+06	1.50E+06	2.77E+06	5.53E+06	1.23E+07	2.99E+06	5.55E+06		
6		5.20E+05	1.30E+06	2.78E+05	4.94E+05	2.60E+06	6.49E+06	1.39E+06	2.47E+06	5.20E+06	1.30E+07	2.78E+06	4.94E+06		
8		4.97E+05	1.34E+06	2.65E+05	4.52E+05	2.49E+06	6.68E+06	1.33E+06	2.26E+06	4.97E+06	1.34E+07	2.65E+06	4.52E+06		
10		4.78E+05	1.35E+06	2.56E+05	4.22E+05	2.39E+06	6.76E+06	1.28E+06	2.11E+06	4.78E+06	1.35E+07	2.56E+06	4.22E+06		
12		4.61E+05	1.35E+06	2.48E+05	4.00E+05	2.30E+06	6.75E+06	1.24E+06	2.00E+06	4.61E+06	1.35E+07	2.48E+06	4.00E+06		
14		4.45E+05	1.33E+06	2.42E+05	3.82E+05	2.22E+06	6.67E+06	1.21E+06	1.91E+06	4.45E+06	1.33E+07	2.42E+06	3.82E+06		
16		4.29E+05	1.31E+06	2.36E+05	3.66E+05	2.15E+06	6.53E+06	1.18E+06	1.83E+06	4.29E+06	1.31E+07	2.36E+06	3.66E+06		
18		4.15E+05	1.27E+06	2.30E+05	3.51E+05	2.07E+06	6.36E+06	1.15E+06	1.75E+06	4.15E+06	1.27E+07	2.30E+06	3.51E+06		
20		4.00E+05	1.23E+06	2.25E+05	3.36E+05	2.00E+06	6.15E+06	1.13E+06	1.68E+06	4.00E+06	1.23E+07	2.25E+06	3.36E+06		
1		3.73E+05	1.14E+06	2.15E+05	3.08E+05	1.87E+06	5.68E+06	1.08E+06	1.54E+06	3.73E+06	1.14E+07	2.15E+06	3.08E+06		
2		2.57E+05	5.67E+05	1.70E+05	1.63E+05	1.28E+06	2.84E+06	8.49E+05	8.17E+05	2.57E+06	5.67E+06	1.70E+06	1.63E+06		
3		2.02E+05	2.53E+05	1.47E+05	8.75E+04	1.01E+06	1.26E+06	7.33E+05	4.38E+05	2.02E+06	2.53E+06	1.47E+06	8.75E+05		
4		1.78E+05	1.19E+05	1.36E+05	5.55E+04	8.91E+05	5.97E+05	6.79E+05	2.78E+05	1.78E+06	1.19E+06	1.36E+06	5.55E+05		
5		1.67E+05	6.73E+04	1.30E+05	4.28E+04	8.36E+05	3.37E+05	6.50E+05	2.14E+05	1.67E+06	6.73E+05	1.30E+06	4.28E+05		
6		1.61E+05	4.73E+04	1.26E+05	3.76E+04	8.07E+05	2.37E+05	6.32E+05	1.88E+05	1.61E+06	4.73E+05	1.26E+06	3.76E+05		
7		1.57E+05	3.95E+04	1.24E+05	3.52E+04	7.86E+05	1.98E+05	6.18E+05	1.76E+05	1.57E+06	3.95E+05	1.24E+06	3.52E+05		
8		1.54E+05	3.62E+04	1.21E+05	3.40E+04	7.70E+05	1.81E+05	6.06E+05	1.70E+05	1.54E+06	3.62E+05	1.21E+06	3.40E+05		
9		1.51E+05	3.46E+04	1.19E+05	3.31E+04	7.55E+05	1.73E+05	5.94E+05	1.66E+05	1.51E+06	3.46E+05	1.19E+06	3.31E+05		
10		1.48E+05	3.35E+04	1.17E+05	3.24E+04	7.41E+05	1.68E+05	5.83E+05	1.62E+05	1.48E+06	3.35E+05	1.17E+06	3.24E+05		
15		1.36E+05	3.05E+04	1.07E+05	2.97E+04	6.80E+05	1.53E+05	5.36E+05	1.49E+05	1.36E+06	3.05E+05	1.07E+06	2.97E+05		
20		1.24E+05	2.76E+04	9.76E+04	2.70E+04	6.20E+05	1.38E+05	4.88E+05	1.35E+05	1.24E+06	2.76E+05	9.76E+05	2.70E+05		
25		1.14E+05	2.53E+04	9.01E+04	2.50E+04	5.72E+05	1.27E+05	4.50E+05	1.25E+05	1.14E+06	2.53E+05	9.01E+05	2.50E+05		
30		1.05E+05	2.31E+04	8.26E+04	2.29E+04	5.24E+05	1.16E+05	4.13E+05	1.14E+05	1.05E+06	2.31E+05	8.26E+05	2.29E+05		

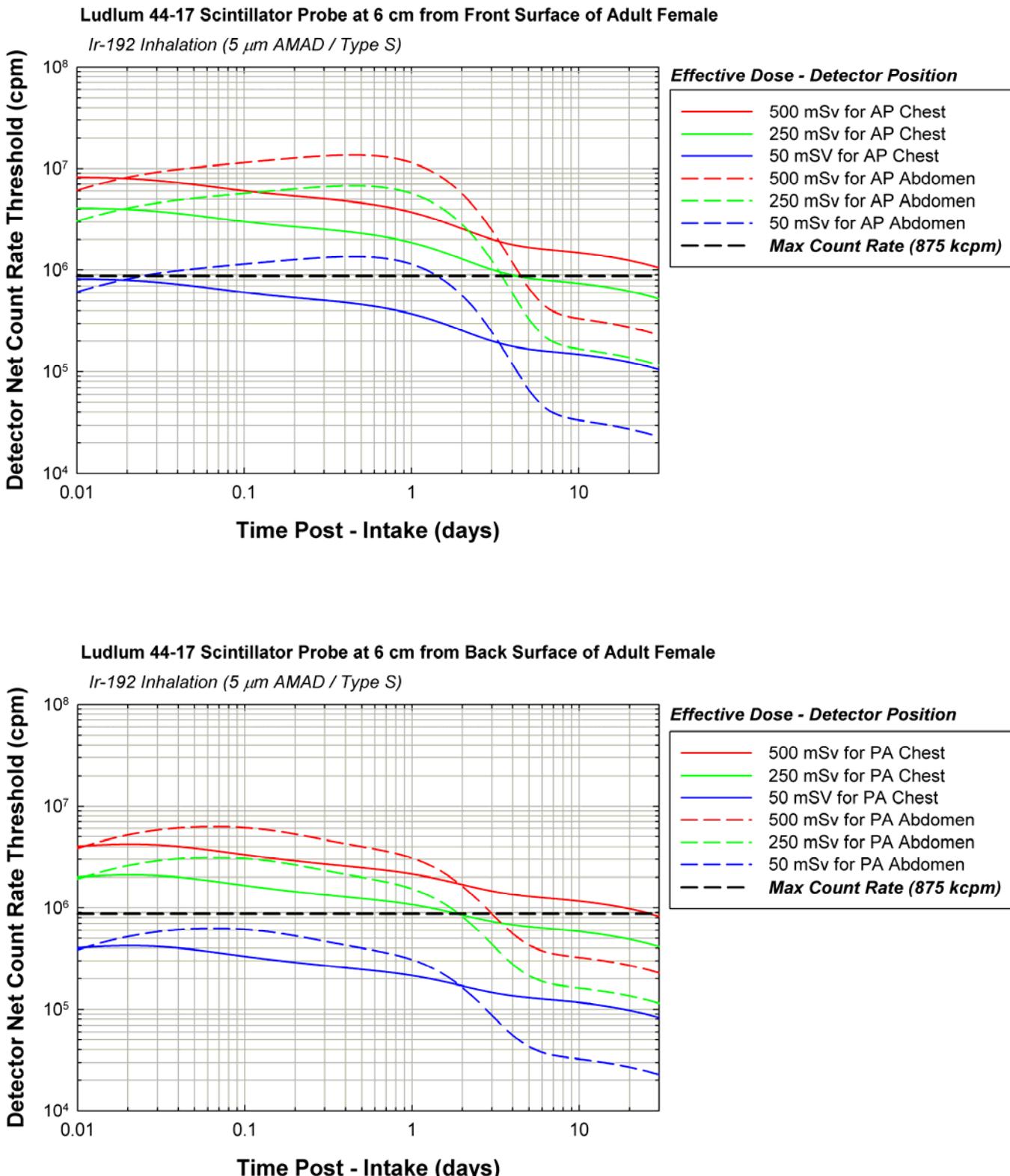
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
0.5		3.41E+05	2.80E+05	1.54E+05	1.73E+05	1.71E+06	1.40E+06	7.71E+05	8.64E+05	3.41E+06	2.80E+06	1.54E+06	1.73E+06		
1		3.26E+05	3.01E+05	1.55E+05	1.89E+05	1.63E+06	1.51E+06	7.76E+05	9.44E+05	3.26E+06	3.01E+06	1.55E+06	1.89E+06		
2		2.99E+05	3.11E+05	1.43E+05	1.86E+05	1.50E+06	1.56E+06	7.17E+05	9.31E+05	2.99E+06	3.11E+06	1.43E+06	1.86E+06		
4		2.78E+05	3.21E+05	1.27E+05	1.69E+05	1.39E+06	1.61E+06	6.34E+05	8.45E+05	2.78E+06	3.21E+06	1.27E+06	1.69E+06		
6		2.68E+05	3.26E+05	1.16E+05	1.55E+05	1.34E+06	1.63E+06	5.82E+05	7.74E+05	2.68E+06	3.26E+06	1.16E+06	1.55E+06		
8		2.60E+05	3.26E+05	1.09E+05	1.45E+05	1.30E+06	1.63E+06	5.47E+05	7.25E+05	2.60E+06	3.26E+06	1.09E+06	1.45E+06		
10		2.52E+05	3.22E+05	1.04E+05	1.38E+05	1.26E+06	1.61E+06	5.21E+05	6.88E+05	2.52E+06	3.22E+06	1.04E+06	1.38E+06		
12		2.43E+05	3.16E+05	9.98E+04	1.32E+05	1.22E+06	1.58E+06	4.99E+05	6.59E+05	2.43E+06	3.16E+06	9.98E+05	1.32E+06		
14		2.35E+05	3.07E+05	9.62E+04	1.27E+05	1.17E+06	1.54E+06	4.81E+05	6.34E+05	2.35E+06	3.07E+06	9.62E+05	1.27E+06		
16		2.26E+05	2.97E+05	9.28E+04	1.22E+05	1.13E+06	1.49E+06	4.64E+05	6.11E+05	2.26E+06	2.97E+06	9.28E+05	1.22E+06		
18		2.17E+05	2.86E+05	8.96E+04	1.18E+05	1.09E+06	1.43E+06	4.48E+05	5.88E+05	2.17E+06	2.86E+06	8.96E+05	1.18E+06		
20		2.08E+05	2.75E+05	8.65E+04	1.13E+05	1.04E+06	1.37E+06	4.33E+05	5.66E+05	2.08E+06	2.75E+06	8.65E+05	1.13E+06		
1		1.90E+05	2.51E+05	8.06E+04	1.04E+05	9.51E+05	1.25E+06	4.03E+05	5.22E+05	1.90E+06	2.51E+06	8.06E+05	1.04E+06		
2		1.06E+05	1.26E+05	5.33E+04	6.03E+04	5.31E+05	6.31E+05	2.67E+05	3.02E+05	1.06E+06	1.26E+06	5.33E+05	6.03E+05		
3		6.49E+04	6.27E+04	3.97E+04	3.75E+04	3.25E+05	3.13E+05	1.99E+05	1.88E+05	6.49E+05	6.27E+05	3.97E+05	3.75E+05		
4		4.77E+04	3.63E+04	3.38E+04	2.78E+04	2.39E+05	1.81E+05	1.69E+05	1.39E+05	4.77E+05	3.63E+05	3.38E+05	2.78E+05		
5		4.07E+04	2.59E+04	3.12E+04	2.38E+04	2.04E+05	1.29E+05	1.56E+05	1.19E+05	4.07E+05	2.59E+05	3.12E+05	2.38E+05		
6		3.77E+04	2.18E+04	2.99E+04	2.21E+04	1.88E+05	1.09E+05	1.49E+05	1.10E+05	3.77E+05	2.18E+05	2.99E+05	2.21E+05		
7		3.61E+04	2.00E+04	2.90E+04	2.12E+04	1.81E+05	1.00E+05	1.45E+05	1.06E+05	3.61E+05	2.00E+05	2.90E+05	2.12E+05		
8		3.52E+04	1.91E+04	2.84E+04	2.06E+04	1.76E+05	9.57E+04	1.42E+05	1.03E+05	3.52E+05	1.91E+05	2.84E+05	2.06E+05		
9		3.44E+04	1.86E+04	2.78E+04	2.02E+04	1.72E+05	9.30E+04	1.39E+05	1.01E+05	3.44E+05	1.86E+05	2.78E+05	2.02E+05		
10		3.37E+04	1.82E+04</												

**Table D20 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iridium-192, Inhalation, 5-μm AMAD Aerosol, Type S, f<sub>A</sub> = 0.01 Ludlum 44-17 Scintillator Probe**

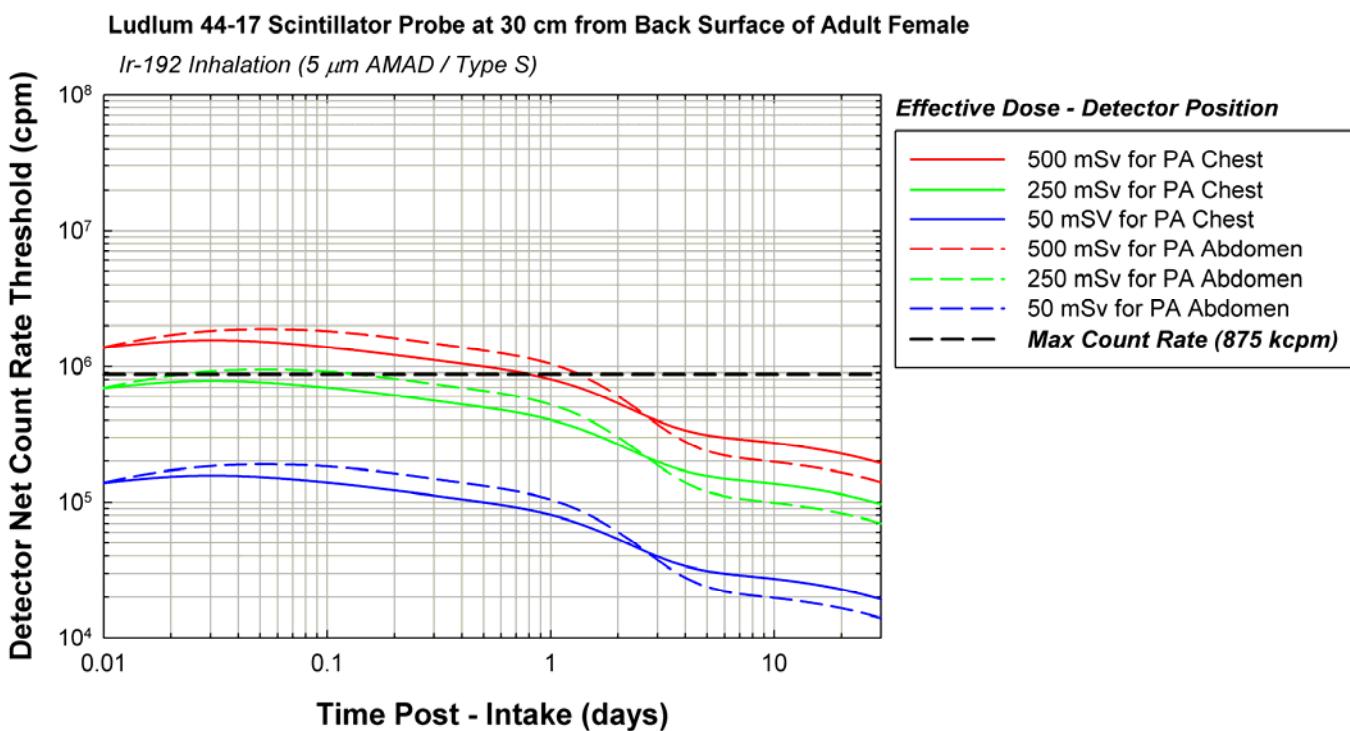
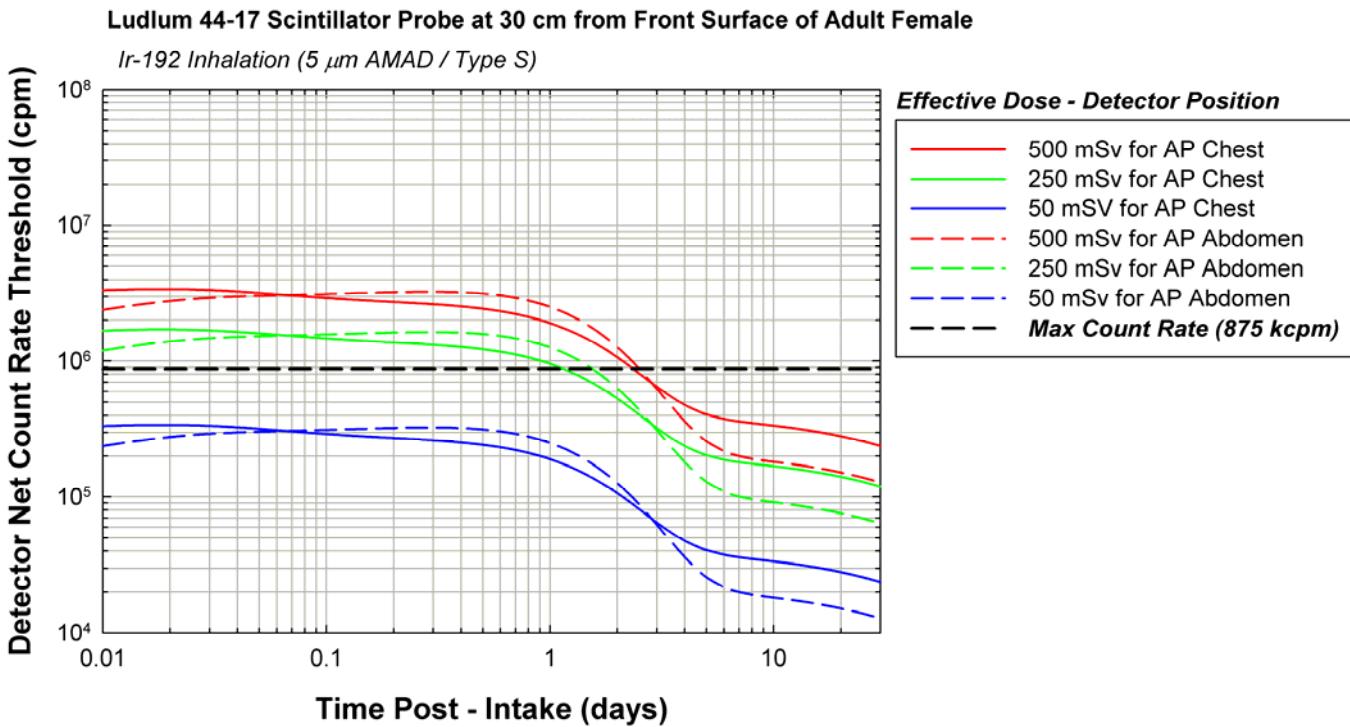
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	6.21E+04	5.40E+04	3.48E+04	3.39E+04	3.11E+05	2.70E+05	1.74E+05	1.70E+05	6.21E+05	5.40E+05	3.48E+05	3.39E+05		
	1	6.27E+04	5.65E+04	3.53E+04	3.63E+04	3.13E+05	2.82E+05	1.77E+05	1.82E+05	6.27E+05	5.65E+05	3.53E+05	3.63E+05		
	2	6.17E+04	5.74E+04	3.34E+04	3.57E+04	3.08E+05	2.87E+05	1.67E+05	1.79E+05	6.17E+05	5.74E+05	3.34E+05	3.57E+05		
	4	6.06E+04	5.75E+04	3.01E+04	3.25E+04	3.03E+05	2.88E+05	1.50E+05	1.62E+05	6.06E+05	5.75E+05	3.01E+05	3.25E+05		
	6	5.95E+04	5.68E+04	2.78E+04	2.98E+04	2.98E+05	2.84E+05	1.39E+05	1.49E+05	5.95E+05	5.68E+05	2.78E+05	2.98E+05		
	8	5.82E+04	5.57E+04	2.61E+04	2.78E+04	2.91E+05	2.78E+05	1.31E+05	1.39E+05	5.82E+05	5.57E+05	2.61E+05	2.78E+05		
	10	5.65E+04	5.42E+04	2.48E+04	2.63E+04	2.83E+05	2.71E+05	1.24E+05	1.31E+05	5.65E+05	5.42E+05	2.48E+05	2.63E+05		
	12	5.47E+04	5.26E+04	2.36E+04	2.50E+04	2.74E+05	2.63E+05	1.18E+05	1.25E+05	5.47E+05	5.26E+05	2.36E+05	2.50E+05		
	14	5.27E+04	5.07E+04	2.26E+04	2.39E+04	2.63E+05	2.53E+05	1.13E+05	1.20E+05	5.27E+05	5.07E+05	2.26E+05	2.39E+05		
	16	5.06E+04	4.87E+04	2.17E+04	2.29E+04	2.53E+05	2.44E+05	1.08E+05	1.15E+05	5.06E+05	4.87E+05	2.17E+05	2.29E+05		
	18	4.84E+04	4.67E+04	2.08E+04	2.20E+04	2.42E+05	2.34E+05	1.04E+05	1.10E+05	4.84E+05	4.67E+05	2.08E+05	2.20E+05		
	20	4.62E+04	4.47E+04	1.99E+04	2.11E+04	2.31E+05	2.23E+05	9.96E+04	1.05E+05	4.62E+05	4.47E+05	1.99E+05	2.11E+05		
1	4.19E+04	4.05E+04	1.83E+04	1.94E+04	2.10E+05	2.03E+05	9.14E+04	9.68E+04	4.19E+05	4.05E+05	1.83E+05	1.94E+05			
2	2.18E+04	2.10E+04	1.10E+04	1.16E+04	1.09E+05	1.05E+05	5.48E+04	5.78E+04	2.18E+05	2.10E+05	1.10E+05	1.16E+05			
3	1.21E+04	1.14E+04	7.44E+03	7.77E+03	6.06E+04	5.72E+04	3.72E+04	3.89E+04	1.21E+05	1.14E+05	7.44E+04	7.77E+04			
4	8.13E+03	7.51E+03	5.97E+03	6.17E+03	4.07E+04	3.76E+04	2.98E+04	3.09E+04	8.13E+04	7.51E+04	5.97E+04	6.17E+04			
5	6.55E+03	5.95E+03	5.35E+03	5.50E+03	3.27E+04	2.98E+04	2.67E+04	2.75E+04	6.55E+04	5.95E+04	5.35E+04	5.50E+04			
6	5.89E+03	5.31E+03	5.05E+03	5.19E+03	2.94E+04	2.66E+04	2.53E+04	2.59E+04	5.89E+04	5.31E+04	5.05E+04	5.19E+04			
7	5.58E+03	5.01E+03	4.89E+03	5.01E+03	2.79E+04	2.51E+04	2.44E+04	2.51E+04	5.58E+04	5.01E+04	4.89E+04	5.01E+04			
8	5.40E+03	4.85E+03	4.77E+03	4.89E+03	2.70E+04	2.42E+04	2.39E+04	2.45E+04	5.40E+04	4.85E+04	4.77E+04	4.89E+04			
9	5.28E+03	4.73E+03	4.67E+03	4.79E+03	2.64E+04	2.37E+04	2.34E+04	2.39E+04	5.28E+04	4.73E+04	4.67E+04	4.79E+04			
10	5.17E+03	4.63E+03	4.58E+03	4.70E+03	2.58E+04	2.32E+04	2.29E+04	2.35E+04	5.17E+04	4.63E+04	4.58E+04	4.70E+04			
15	4.71E+03	4.22E+03	4.19E+03	4.29E+03	2.36E+04	2.11E+04	2.09E+04	2.14E+04	4.71E+04	4.22E+04	4.19E+04	4.29E+04			
20	4.31E+03	3.87E+03	3.83E+03	3.93E+03	2.16E+04	1.93E+04	1.92E+04	1.96E+04	4.31E+04	3.87E+04	3.83E+04	3.93E+04			
25	3.98E+03	3.57E+03	3.54E+03	3.63E+03	1.99E+04	1.78E+04	1.77E+04	1.81E+04	3.98E+04	3.57E+04	3.54E+04	3.63E+04			
30	3.65E+03	3.27E+03	3.25E+03	3.32E+03	1.82E+04	1.63E+04	1.62E+04	1.66E+04	3.65E+04	3.27E+04	3.25E+04	3.32E+04			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	1.71E+04	1.71E+04	1.04E+04	1.04E+04	8.54E+04	8.54E+04	5.19E+04	5.19E+04	1.71E+05	1.71E+05	1.04E+05	1.04E+05		
	1	1.73E+04	1.73E+04	1.07E+04	1.07E+04	8.63E+04	8.63E+04	5.34E+04	5.34E+04	1.73E+05	1.73E+05	1.07E+05	1.07E+05		
	2	1.69E+04	1.69E+04	1.03E+04	1.03E+04	8.47E+04	8.47E+04	5.14E+04	5.14E+04	1.69E+05	1.69E+05	1.03E+05	1.03E+05		
	4	1.66E+04	1.66E+04	9.33E+03	9.33E+03	8.28E+04	8.28E+04	4.67E+04	4.67E+04	1.66E+05	1.66E+05	9.33E+04	9.33E+04		
	6	1.63E+04	1.63E+04	8.62E+03	8.62E+03	8.13E+04	8.13E+04	4.31E+04	4.31E+04	1.63E+05	1.63E+05	8.62E+04	8.62E+04		
	8	1.59E+04	1.59E+04	8.08E+03	8.08E+03	7.94E+04	7.94E+04	4.04E+04	4.04E+04	1.59E+05	1.59E+05	8.08E+04	8.08E+04		
	10	1.55E+04	1.55E+04	7.66E+03	7.66E+03	7.73E+04	7.73E+04	3.83E+04	3.83E+04	1.55E+05	1.55E+05	7.66E+04	7.66E+04		
	12	1.50E+04	1.50E+04	7.30E+03	7.30E+03	7.49E+04	7.49E+04	3.65E+04	3.65E+04	1.50E+05	1.50E+05	7.30E+04	7.30E+04		
	14	1.44E+04	1.44E+04	6.98E+03	6.98E+03	7.22E+04	7.22E+04	3.49E+04	3.49E+04	1.44E+05	1.44E+05	6.98E+04	6.98E+04		
	16	1.39E+04	1.39E+04	6.68E+03	6.68E+03	6.94E+04	6.94E+04	3.34E+04	3.34E+04	1.39E+05	1.39E+05	6.68E+04	6.68E+04		
	18	1.33E+04	1.33E+04	6.40E+03	6.40E+03	6.66E+04	6.66E+04	3.20E+04	3.20E+04	1.33E+05	1.33E+05	6.40E+04	6.40E+04		
	20	1.27E+04	1.27E+04	6.12E+03	6.12E+03	6.37E+04	6.37E+04	3.06E+04	3.06E+04	1.27E+05	1.27E+05	6.12E+04	6.12E+04		
1	1.16E+04	1.16E+04	5.60E+03	5.60E+03	5.79E+04	5.79E+04	2.80E+04	2.80E+04	1.16E+05	1.16E+05	5.60E+04	5.60E+04			
2	6.07E+03	6.07E+03	3.23E+03	3.23E+03	3.03E+04	3.03E+04	1.62E+04	1.62E+04	6.07E+04	6.07E+04	3.23E+04	3.23E+04			
3	3.39E+03	3.39E+03	2.09E+03	2.09E+03	1.69E+04	1.69E+04	1.05E+04	1.05E+04	3.39E+04	3.39E+04	2.09E+04	2.09E+04			
4	2.28E+03	2.28E+03	1.62E+03	1.62E+03	1.14E+04	1.14E+04	8.08E+03	8.08E+03	2.28E+04	2.28E+04	1.62E+04	1.62E+04			
5	1.83E+03	1.83E+03	1.42E+03	1.42E+03	9.17E+03	9.17E+03	7.10E+03	7.10E+03	1.83E+04	1.83E+04	1.42E+04	1.42E+04			
6	1.65E+03	1.65E+03	1.33E+03	1.33E+03	8.25E+03	8.25E+03	6.65E+03	6.65E+03	1.65E+04	1.65E+04	1.33E+04	1.33E+04			
7	1.56E+03	1.56E+03	1.28E+03	1.28E+03	7.82E+03	7.82E+03	6.41E+03	6.41E+03	1.56E+04	1.56E+04	1.28E+04	1.28E+04			
8	1.52E+03	1.52E+03	1.25E+03	1.25E+03	7.58E+03	7.58E+03	6.25E+03	6.25E+03	1.52E+04	1.52E+04	1.25E+04	1.25E+04			
9	1.48E+03	1.48E+03	1.22E+03	1.22E+03	7.40E+03	7.40E+03	6.12E+03	6.12E+03	1.48E+04	1.48E+04	1.22E+04	1.22E+04			
10	1.45E+03	1.45E+03	1.20E+03	1.20E+03	7.25E+03	7.25E+03	6.00E+03	6.00E+03	1.45E+04						

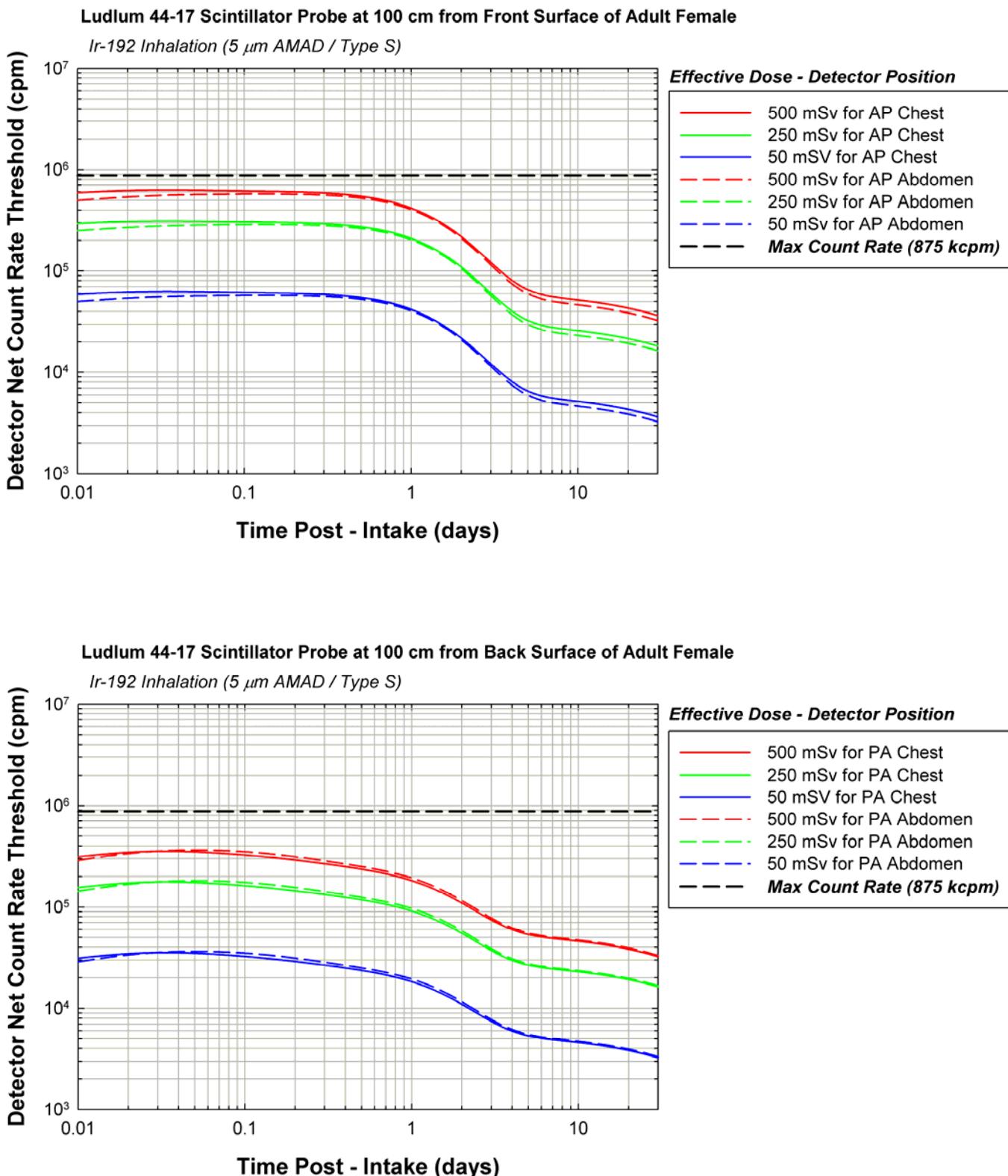
**Table D20 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 5-μm AMAD Aerosol, Type S,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



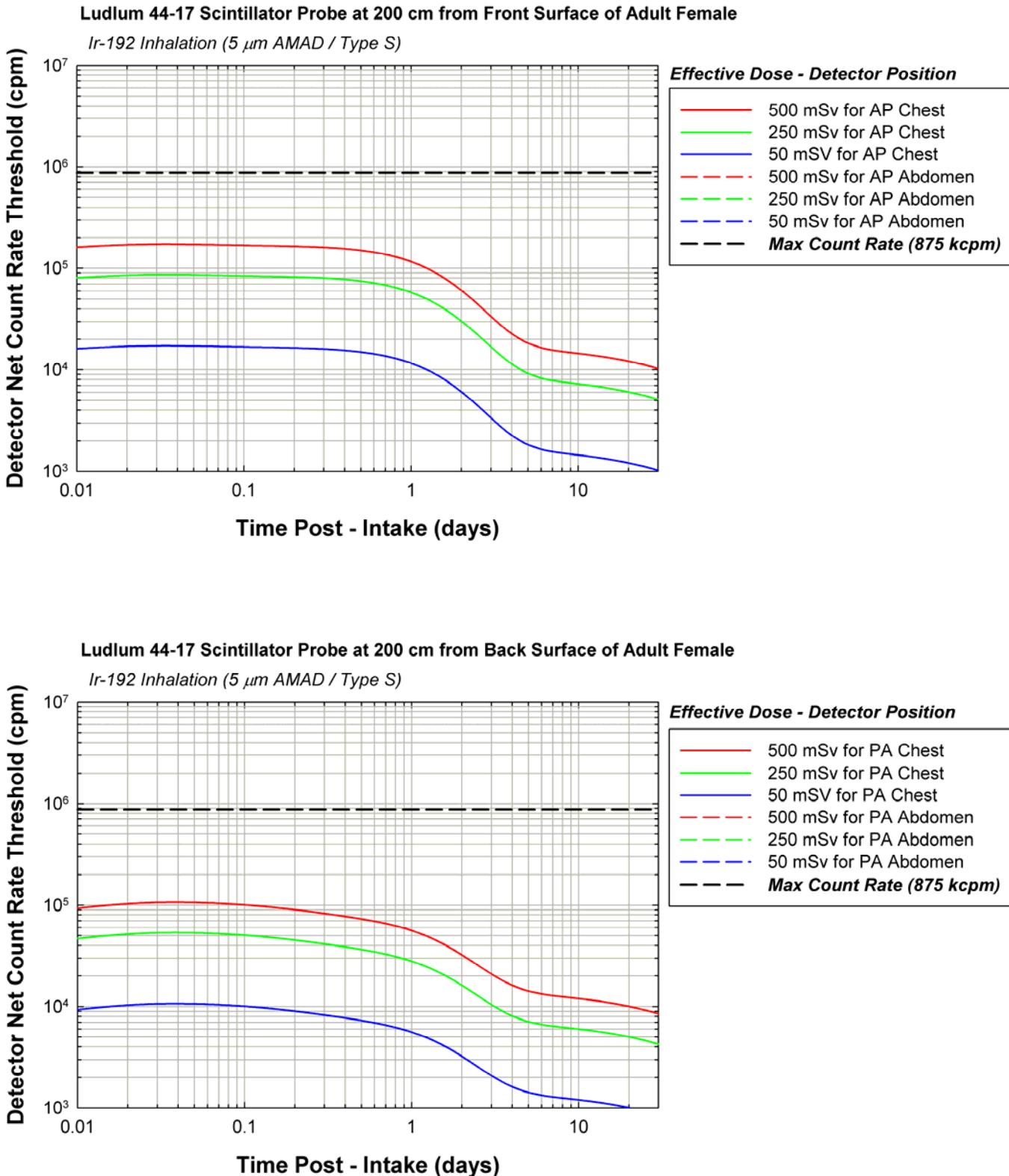
**Table D20 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 5-μm AMAD Aerosol, Type S,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D20 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 5- $\mu$ m AMAD Aerosol, Type S,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D20 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Inhalation, 5- $\mu$ m AMAD Aerosol, Type S,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



**Table D21 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iridium-192, Ingestion,  $f_A = 0.01$  Ludlum 44-17 Scintillator Probe**

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 6 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	2.53E+06	7.99E+06	1.76E+06	5.04E+06	1.27E+07	3.99E+07	8.79E+06	2.52E+07	2.53E+07	7.99E+07	1.76E+07	5.04E+07		
	1	1.98E+06	8.61E+06	1.44E+06	5.19E+06	9.90E+06	4.31E+07	7.19E+06	2.60E+07	1.98E+07	8.61E+07	1.44E+07	5.19E+07		
	2	1.42E+06	9.44E+06	1.08E+06	5.06E+06	7.10E+06	4.72E+07	5.40E+06	2.53E+07	1.42E+07	9.44E+07	1.08E+07	5.06E+07		
	4	1.10E+06	1.04E+07	8.07E+05	4.40E+06	5.49E+06	5.19E+07	4.04E+06	2.20E+07	1.10E+07	1.04E+08	8.07E+06	4.40E+07		
	6	1.03E+06	1.09E+07	7.03E+05	3.86E+06	5.17E+06	5.45E+07	3.52E+06	1.93E+07	1.03E+07	1.09E+08	7.03E+06	3.86E+07		
	8	1.02E+06	1.12E+07	6.49E+05	3.51E+06	5.08E+06	5.59E+07	3.25E+06	1.75E+07	1.02E+07	1.12E+08	6.49E+06	3.51E+07		
	10	1.01E+06	1.13E+07	6.15E+05	3.26E+06	5.03E+06	5.65E+07	3.08E+06	1.63E+07	1.01E+07	1.13E+08	6.15E+06	3.26E+07		
	12	9.97E+05	1.13E+07	5.90E+05	3.07E+06	4.98E+06	5.63E+07	2.95E+06	1.54E+07	9.97E+06	1.13E+08	5.90E+06	3.07E+07		
	14	9.83E+05	1.11E+07	5.70E+05	2.92E+06	4.91E+06	5.54E+07	2.85E+06	1.46E+07	9.83E+06	1.11E+08	5.70E+06	2.92E+07		
	16	9.64E+05	1.08E+07	5.51E+05	2.79E+06	4.82E+06	5.42E+07	2.76E+06	1.39E+07	9.64E+06	1.08E+08	5.51E+06	2.79E+07		
	18	9.40E+05	1.05E+07	5.32E+05	2.66E+06	4.70E+06	5.26E+07	2.66E+06	1.33E+07	9.40E+06	1.05E+08	5.32E+06	2.66E+07		
	20	9.12E+05	1.02E+07	5.13E+05	2.54E+06	4.56E+06	5.08E+07	2.56E+06	1.27E+07	9.12E+06	1.02E+08	5.13E+06	2.54E+07		
1	8.47E+05	9.32E+06	4.71E+05	2.29E+06	4.23E+06	4.66E+07	2.36E+06	1.15E+07	8.47E+06	9.32E+07	4.71E+06	2.29E+07			
2	4.25E+05	4.45E+06	2.33E+05	1.07E+06	2.12E+06	2.22E+07	1.17E+06	5.36E+06	4.25E+06	4.45E+07	2.33E+06	1.07E+07			
3	1.82E+05	1.81E+06	1.01E+05	4.43E+05	9.10E+05	9.06E+06	5.07E+05	2.21E+06	1.82E+06	1.81E+07	1.01E+06	4.43E+06			
4	7.83E+04	7.10E+05	4.56E+04	1.82E+05	3.92E+05	3.55E+06	2.28E+05	9.10E+05	7.83E+05	7.10E+06	4.56E+05	1.82E+06			
5	3.79E+04	2.85E+05	2.38E+04	8.17E+04	1.89E+05	1.42E+06	1.19E+05	4.08E+05	3.79E+05	2.85E+06	2.38E+05	8.17E+05			
6	2.25E+04	1.25E+05	1.55E+04	4.39E+04	1.12E+05	6.27E+05	7.73E+04	2.19E+05	2.25E+05	1.25E+06	1.55E+05	4.39E+05			
7	1.66E+04	6.62E+04	1.22E+04	2.97E+04	8.32E+04	3.31E+05	6.12E+04	1.48E+05	1.66E+05	6.62E+05	1.22E+05	2.97E+05			
8	1.43E+04	4.41E+04	1.09E+04	2.41E+04	7.15E+04	2.20E+05	5.45E+04	1.21E+05	1.43E+05	4.41E+05	1.09E+05	2.41E+05			
9	1.33E+04	3.55E+04	1.03E+04	2.18E+04	6.63E+04	1.78E+05	5.14E+04	1.09E+05	1.33E+05	3.55E+05	1.03E+05	2.18E+05			
10	1.27E+04	3.19E+04	9.92E+03	2.07E+04	6.35E+04	1.60E+05	4.96E+04	1.03E+05	1.27E+05	3.19E+05	9.92E+04	2.07E+05			
15	1.15E+04	2.84E+04	9.03E+03	1.87E+04	5.77E+04	1.42E+05	4.51E+04	9.37E+04	1.15E+05	2.84E+05	9.03E+04	1.87E+05			
20	1.04E+04	2.48E+04	8.14E+03	1.68E+04	5.19E+04	1.24E+05	4.07E+04	8.38E+04	1.04E+05	2.48E+05	8.14E+04	1.68E+05			
25	9.63E+03	2.30E+04	7.55E+03	1.55E+04	4.81E+04	1.15E+05	3.77E+04	7.77E+04	9.63E+04	2.30E+05	7.55E+04	1.55E+05			
30	8.87E+03	2.12E+04	6.96E+03	1.43E+04	4.44E+04	1.06E+05	3.48E+04	7.16E+04	8.87E+04	2.12E+05	6.96E+04	1.43E+05			

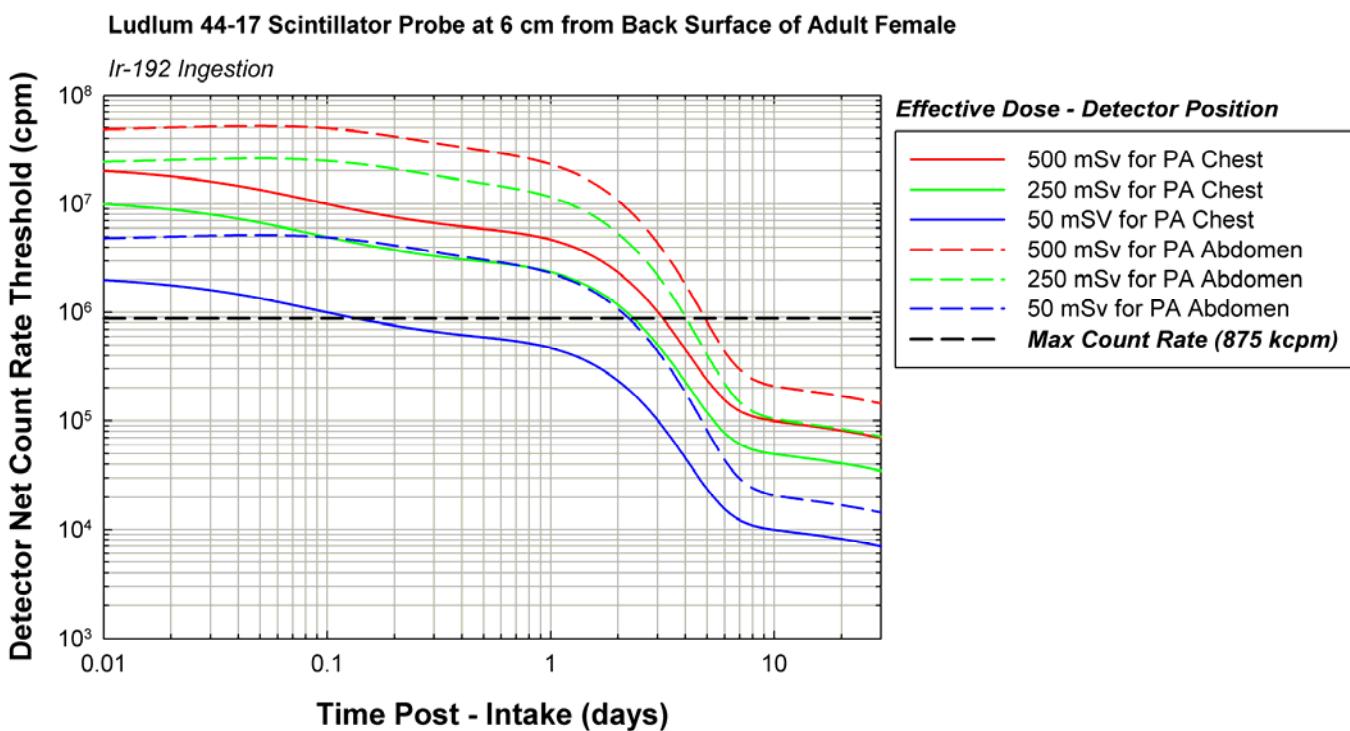
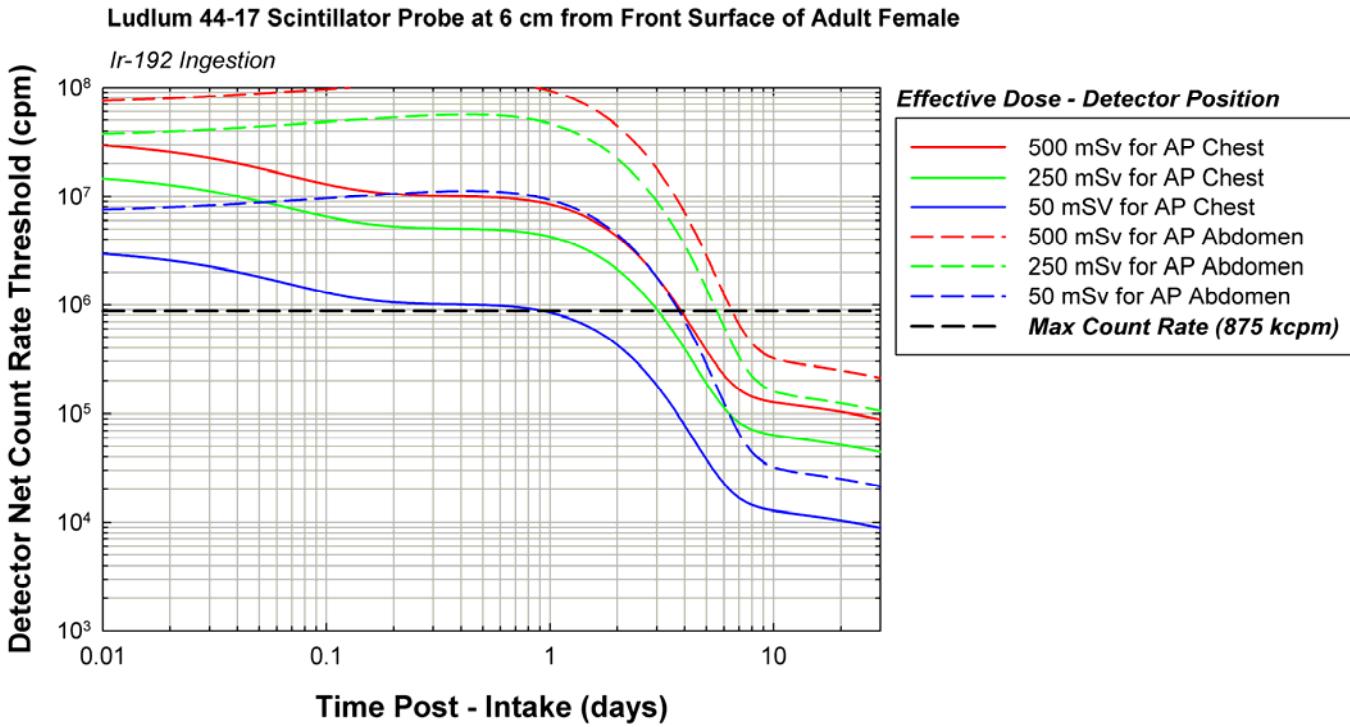
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 30 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	1.55E+06	2.14E+06	8.73E+05	1.38E+06	7.75E+06	1.07E+07	4.36E+06	6.92E+06	1.55E+07	2.14E+07	8.73E+06	1.38E+07		
	1	1.38E+06	2.17E+06	8.09E+05	1.38E+06	6.91E+06	1.09E+07	4.05E+06	6.92E+06	1.38E+07	2.17E+07	8.09E+06	1.38E+07		
	2	1.22E+06	2.24E+06	7.15E+05	1.33E+06	6.11E+06	1.12E+07	3.57E+06	6.63E+06	1.22E+07	2.24E+07	7.15E+06	1.33E+07		
	4	1.14E+06	2.34E+06	6.00E+05	1.17E+06	5.72E+06	1.17E+07	3.00E+06	5.86E+06	1.14E+07	2.34E+07	6.00E+06	1.17E+07		
	6	1.14E+06	2.39E+06	5.33E+05	1.06E+06	5.69E+06	1.19E+07	2.67E+06	5.28E+06	1.14E+07	2.39E+07	5.33E+06	1.06E+07		
	8	1.14E+06	2.40E+06	4.91E+05	9.79E+05	5.68E+06	1.20E+07	2.46E+06	4.90E+06	1.14E+07	2.40E+07	4.91E+06	9.79E+06		
	10	1.13E+06	2.38E+06	4.62E+05	9.23E+05	5.65E+06	1.19E+07	2.31E+06	4.61E+06	1.13E+07	2.38E+07	4.62E+06	9.23E+06		
	12	1.12E+06	2.34E+06	4.40E+05	8.78E+05	5.58E+06	1.17E+07	2.20E+06	4.39E+06	1.12E+07	2.34E+07	4.40E+06	8.78E+06		
	14	1.09E+06	2.27E+06	4.21E+05	8.40E+05	5.46E+06	1.14E+07	2.11E+06	4.20E+06	1.09E+07	2.27E+07	4.21E+06	8.40E+06		
	16	1.06E+06	2.20E+06	4.04E+05	8.04E+05	5.32E+06	1.10E+07	2.02E+06	4.02E+06	1.06E+07	2.20E+07	4.04E+06	8.04E+06		
	18	1.03E+06	2.12E+06	3.86E+05	7.69E+05	5.15E+06	1.06E+07	1.93E+06	3.85E+06	1.03E+07	2.12E+07	3.86E+06	7.69E+06		
	20	9.92E+05	2.03E+06	3.69E+05	7.34E+05	4.96E+06	1.01E+07	1.85E+06	3.67E+06	9.92E+06	2.03E+07	3.69E+06	7.34E+06		
1	9.09E+05	1.84E+06	3.35E+05	6.64E+05	4.55E+06	9.18E+06	1.68E+06	3.32E+06	9.09E+06	1.84E+07	3.35E+06	6.64E+06			
2	4.35E+05	8.47E+05	1.59E+05	3.10E+05	2.18E+06	4.23E+06	7.96E+05	1.55E+06	4.35E+06	8.47E+06	1.59E+06	3.10E+06			
3	1.80E+05	3.43E+05	6.73E+04	1.28E+05	9.00E+05	1.71E+06	3.37E+05	6.42E+05	1.80E+06	3.43E+06	6.73E+05	1.28E+06			
4	7.35E+04	1.36E+05	2.92E+04	5.30E+04	3.67E+05	6.78E+05	1.46E+05	2.65E+05	7.35E+05	1.36E+06	2.92E+05	5.30E+05			
5	3.23E+04	5.62E+04	1.44E+04	2.40E+04	1.61E+05	2.81E+05	7.20E+04	1.20E+05	3.23E+05	5.62E+05	1.44E+05	2.40E+05			
6	1.68E+04	2.64E+04	8.82E+03	1.31E+04	8.40E+04	1.32E+05	4.41E+04	6.57E+04	1.68E+05	2.64E+05	8.82E+04	1.31E+05			
7	1.10E+04	1.54E+04	6.68E+03	9.02E+03	5.48E+04	7.68E+04	3.34E+04	4.51E+04	1.10E+05	1.54E+05	6.68E+04	9.02E+04			
8	8.72E+03	1.12E+04	5.81E+03	7.41E+03	4.36E+04	5.58E+04	2.91E+04	3.71E+04	8.72E+04	1.12E+05	5.81E+04	7.41E+04			
9	7.80E+03	9.50E+03	5.42E+03	6.73E+03	3.90E+04	4.75E+04	2.71E+04	3.37E+04	7.80E+04	9.50E+04	5.42E+04	6.73E+04			
10	7.36E+03	8.78E+03	5.21E+03	6.40E+03	3.68E+04	4.39E+04	2.61E+04	3.20E+04	7.36E+04	8.78E+04					

**Table D21 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female Iridium-192, Ingestion,  $f_A = 0.01$  Ludlum 44-17 Scintillator Probe**

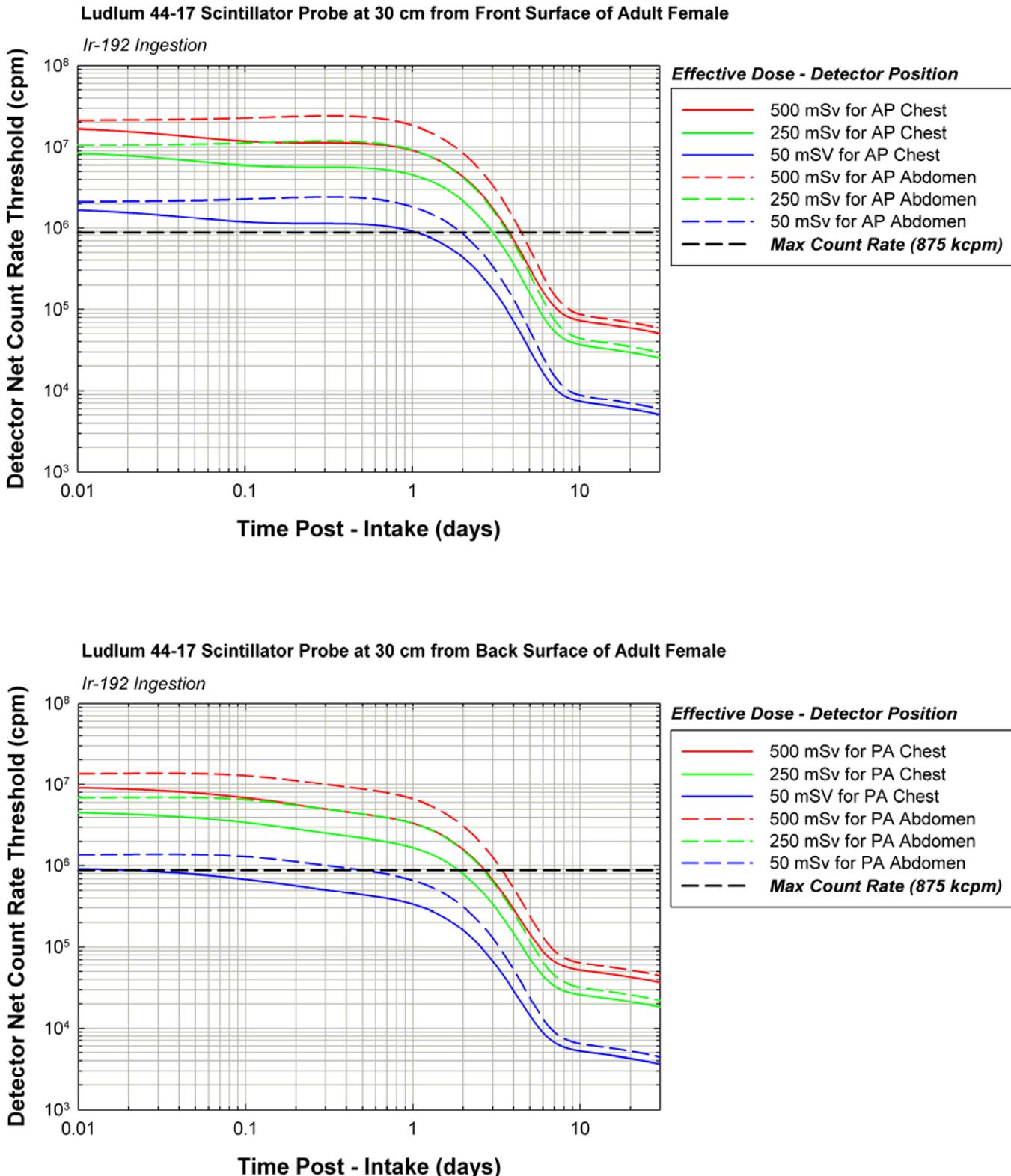
Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 100 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	3.20E+05	3.25E+05	2.23E+05	2.35E+05	1.60E+06	1.62E+06	1.11E+06	1.17E+06	3.20E+06	3.25E+06	2.23E+06	2.35E+06		
	1	3.15E+05	3.33E+05	2.12E+05	2.35E+05	1.58E+06	1.66E+06	1.06E+06	1.17E+06	3.15E+06	3.33E+06	2.12E+06	2.35E+06		
	2	3.13E+05	3.42E+05	1.95E+05	2.25E+05	1.57E+06	1.71E+06	9.75E+05	1.13E+06	3.13E+06	3.42E+06	1.95E+06	2.25E+06		
	4	3.18E+05	3.50E+05	1.71E+05	1.99E+05	1.59E+06	1.75E+06	8.53E+05	9.93E+05	3.18E+06	3.50E+06	1.71E+06	1.99E+06		
	6	3.21E+05	3.50E+05	1.55E+05	1.78E+05	1.60E+06	1.75E+06	7.74E+05	8.91E+05	3.21E+06	3.50E+06	1.55E+06	1.78E+06		
	8	3.20E+05	3.47E+05	1.44E+05	1.64E+05	1.60E+06	1.74E+06	7.19E+05	8.19E+05	3.20E+06	3.47E+06	1.44E+06	1.64E+06		
	10	3.16E+05	3.41E+05	1.35E+05	1.53E+05	1.58E+06	1.71E+06	6.77E+05	7.66E+05	3.16E+06	3.41E+06	1.35E+06	1.53E+06		
	12	3.09E+05	3.33E+05	1.28E+05	1.45E+05	1.54E+06	1.66E+06	6.41E+05	7.23E+05	3.09E+06	3.33E+06	1.28E+06	1.45E+06		
	14	3.00E+05	3.22E+05	1.22E+05	1.37E+05	1.50E+06	1.61E+06	6.10E+05	6.86E+05	3.00E+06	3.22E+06	1.22E+06	1.37E+06		
	16	2.89E+05	3.10E+05	1.16E+05	1.30E+05	1.45E+06	1.55E+06	5.81E+05	6.52E+05	2.89E+06	3.10E+06	1.16E+06	1.30E+06		
	18	2.78E+05	2.97E+05	1.10E+05	1.24E+05	1.39E+06	1.49E+06	5.52E+05	6.20E+05	2.78E+06	2.97E+06	1.10E+06	1.24E+06		
	20	2.66E+05	2.84E+05	1.05E+05	1.18E+05	1.33E+06	1.42E+06	5.24E+05	5.89E+05	2.66E+06	2.84E+06	1.05E+06	1.18E+06		
1	2.41E+05	2.56E+05	9.40E+04	1.06E+05	1.20E+06	1.28E+06	4.70E+05	5.28E+05	2.41E+06	2.56E+06	9.40E+05	1.06E+06			
2	1.11E+05	1.17E+05	4.28E+04	4.81E+04	5.54E+05	5.85E+05	2.14E+05	2.41E+05	1.11E+06	1.17E+06	4.28E+05	4.81E+05			
3	4.50E+04	4.74E+04	1.77E+04	1.99E+04	2.25E+05	2.37E+05	8.87E+04	9.95E+04	4.50E+05	4.74E+05	1.77E+05	1.99E+05			
4	1.80E+04	1.90E+04	7.54E+03	8.37E+03	9.02E+04	9.51E+04	3.77E+04	4.18E+04	1.80E+05	1.90E+05	7.54E+04	8.37E+04			
5	7.69E+03	8.13E+03	3.62E+03	3.95E+03	3.85E+04	4.07E+04	1.81E+04	1.97E+04	7.69E+04	8.13E+04	3.62E+04	3.95E+04			
6	3.81E+03	4.05E+03	2.15E+03	2.28E+03	1.91E+04	2.03E+04	1.08E+04	1.14E+04	3.81E+04	4.05E+04	2.15E+04	2.28E+04			
7	2.36E+03	2.53E+03	1.59E+03	1.65E+03	1.18E+04	1.26E+04	7.94E+03	8.26E+03	2.36E+04	2.53E+04	1.59E+04	1.65E+04			
8	1.81E+03	1.94E+03	1.36E+03	1.40E+03	9.04E+03	9.72E+03	6.82E+03	7.02E+03	1.81E+04	1.94E+04	1.36E+04	1.40E+04			
9	1.59E+03	1.71E+03	1.27E+03	1.29E+03	7.93E+03	8.54E+03	6.33E+03	6.47E+03	1.59E+04	1.71E+04	1.27E+04	1.29E+04			
10	1.48E+03	1.60E+03	1.21E+03	1.24E+03	7.42E+03	8.00E+03	6.07E+03	6.19E+03	1.48E+04	1.60E+04	1.21E+04	1.24E+04			
15	1.30E+03	1.41E+03	1.08E+03	1.10E+03	6.52E+03	7.04E+03	5.42E+03	5.52E+03	1.30E+04	1.41E+04	1.08E+04	1.10E+04			
20	1.19E+03	1.28E+03	9.90E+02	1.01E+03	5.95E+03	6.42E+03	4.95E+03	5.04E+03	1.19E+04	1.28E+04	9.90E+03	1.01E+04			
25	1.10E+03	1.19E+03	9.18E+02	9.35E+02	5.51E+03	5.95E+03	4.59E+03	4.68E+03	1.10E+04	1.19E+04	9.18E+03	9.35E+03			
30	1.02E+03	1.10E+03	8.47E+02	8.62E+02	5.08E+03	5.48E+03	4.23E+03	4.31E+03	1.02E+04	1.10E+04	8.47E+03	8.62E+03			

Ludlum 44-17 Scintillator Probe (Distance from Surface of 50th Percentile Adult Female: 200 cm)															
Time Since Intake		Net Count Rate (cpm) for 50 mSv ED				Net Count Rate (cpm) for 250 mSv ED				Net Count Rate (cpm) for 500 mSv ED					
Time (days)	Time (hours)	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen	AP Chest	AP Abdomen	PA Chest	PA Abdomen		
	0.5	9.40E+04	9.40E+04	6.76E+04	6.76E+04	4.70E+05	4.70E+05	3.38E+05	3.38E+05	9.40E+05	9.40E+05	6.76E+05	6.76E+05		
	1	9.21E+04	9.21E+04	6.59E+04	6.59E+04	4.61E+05	4.61E+05	3.30E+05	3.30E+05	9.21E+05	9.21E+05	6.59E+05	6.59E+05		
	2	9.08E+04	9.08E+04	6.19E+04	6.19E+04	4.54E+05	4.54E+05	3.10E+05	3.10E+05	9.08E+05	9.08E+05	6.19E+05	6.19E+05		
	4	9.11E+04	9.11E+04	5.48E+04	5.48E+04	4.55E+05	4.55E+05	2.74E+05	2.74E+05	9.11E+05	9.11E+05	5.48E+05	5.48E+05		
	6	9.13E+04	9.13E+04	4.98E+04	4.98E+04	4.57E+05	4.57E+05	2.49E+05	2.49E+05	9.13E+05	9.13E+05	4.98E+05	4.98E+05		
	8	9.08E+04	9.08E+04	4.63E+04	4.63E+04	4.54E+05	4.54E+05	2.31E+05	2.31E+05	9.08E+05	9.08E+05	4.63E+05	4.63E+05		
	10	8.95E+04	8.95E+04	4.36E+04	4.36E+04	4.48E+05	4.48E+05	2.18E+05	2.18E+05	8.95E+05	8.95E+05	4.36E+05	4.36E+05		
	12	8.76E+04	8.76E+04	4.13E+04	4.13E+04	4.38E+05	4.38E+05	2.07E+05	2.07E+05	8.76E+05	8.76E+05	4.13E+05	4.13E+05		
	14	8.50E+04	8.50E+04	3.94E+04	3.94E+04	4.25E+05	4.25E+05	1.97E+05	1.97E+05	8.50E+05	8.50E+05	3.94E+05	3.94E+05		
	16	8.21E+04	8.21E+04	3.75E+04	3.75E+04	4.11E+05	4.11E+05	1.87E+05	1.87E+05	8.21E+05	8.21E+05	3.75E+05	3.75E+05		
	18	7.90E+04	7.90E+04	3.57E+04	3.57E+04	3.95E+05	3.95E+05	1.78E+05	1.78E+05	7.90E+05	7.90E+05	3.57E+05	3.57E+05		
	20	7.56E+04	7.56E+04	3.39E+04	3.39E+04	3.78E+05	3.78E+05	1.69E+05	1.69E+05	7.56E+05	7.56E+05	3.39E+05	3.39E+05		
1	6.84E+04	6.84E+04	3.04E+04	3.04E+04	3.42E+05	3.42E+05	1.52E+05	1.52E+05	6.84E+05	6.84E+05	3.04E+05	3.04E+05			
2	3.16E+04	3.16E+04	1.39E+04	1.39E+04	1.58E+05	1.58E+05	6.95E+04	6.95E+04	3.16E+05	3.16E+05	1.39E+05	1.39E+05			
3	1.29E+04	1.29E+04	5.74E+03	5.74E+03	6.46E+04	6.46E+04	2.87E+04	2.87E+04	1.29E+05	1.29E+05	5.74E+04	5.74E+04			
4	5.22E+03	5.22E+03	2.41E+03	2.41E+03	2.61E+04	2.61E+04	1.21E+04	1.21E+04	5.22E+04	5.22E+04	2.41E+04	2.41E+04			
5	2.27E+03	2.27E+03	1.14E+03	1.14E+03	1.13E+04	1.13E+04	5.68E+03	5.68E+03	2.27E+04	2.27E+04	1.14E+04	1.14E+04			
6	1.16E+03	1.16E+03	6.55E+02	6.55E+02	5.79E+03	5.79E+03	3.27E+03	3.27E+03	1.16E+04	1.16E+04	6.55E+03	6.55E+03			
7	7.41E+02	7.41E+02	4.72E+02	4.72E+02	3.71E+03	3.71E+03	2.36E+03	2.36E+03	7.41E+03	7.41E+03	4.72E+03	4.72E+03			
8	5.82E+02	5.82E+02	4.00E+02	4.00E+02	2.91E+03	2.91E+03	2.00E+03	2.00E+03	5.82E+03	5.82E+03	4.00E+03	4.00E+03			
9	5.16E+02	5.16E+02	3.69E+02	3.69E+02	2.58E+03	2.58E+03	1.84E+03	1.84E+03	5.16E+03	5.16E+03	3.69E+03	3.69E+03			
10	4.86E+02	4.86E+02	3.53E+02	3.53E+02	2.43E+03	2.43E+03	1.76E+03	1.76E+03	4.86E+03	4.86E+0					

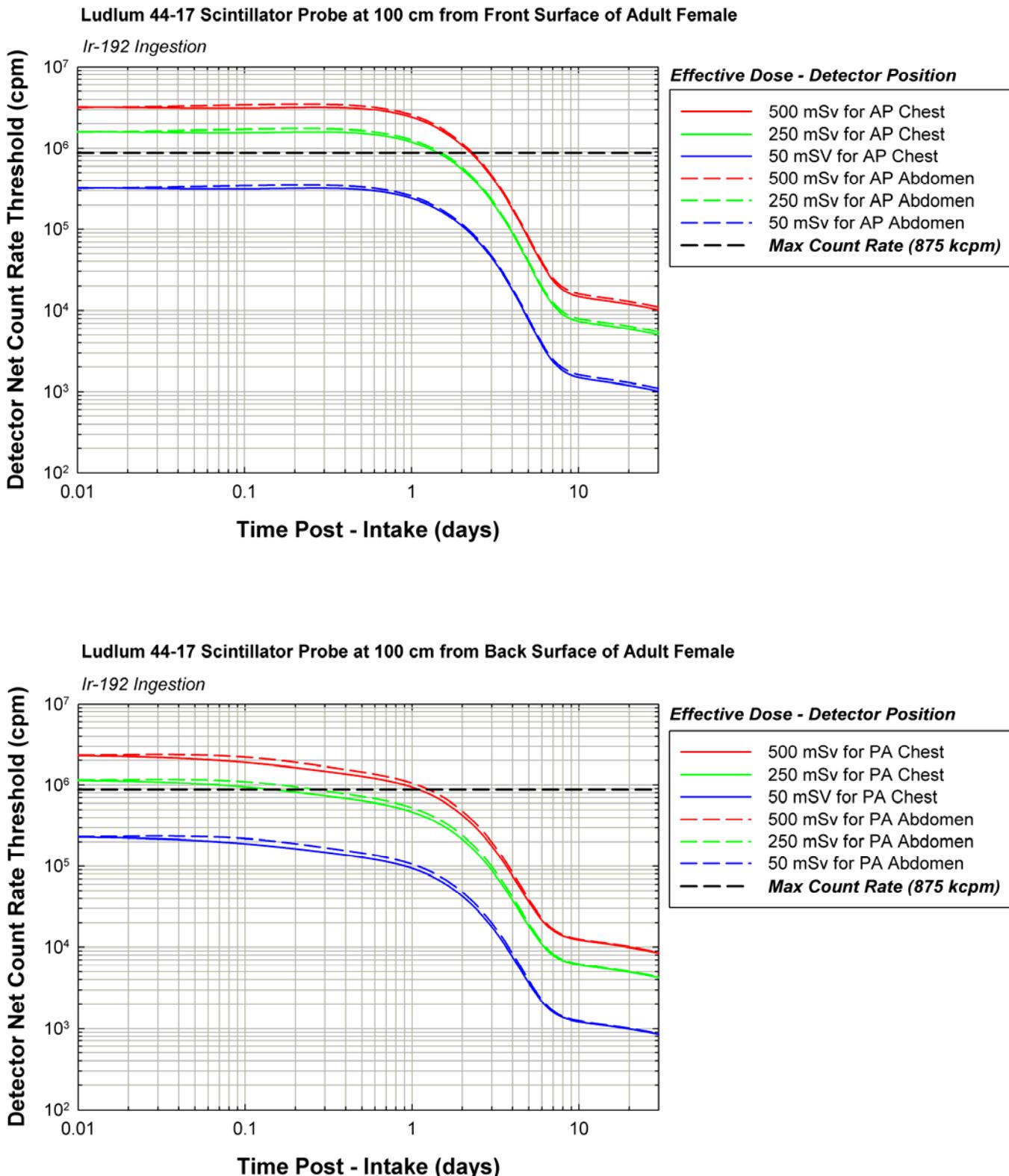
**Table D21 – Net Count Rates (cpm) corresponding to 50, 250, and 500 mSv Effective Dose to the 50<sup>th</sup> Percentile Adult Female  
Iridium-192, Ingestion,  $f_A = 0.01$  **Ludlum 44-17 Scintillator Probe****



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