

Table I: mAs Reduction Factors for the Pediatric Body

| Abdomen/ Pelvis: | Abdomen/ Pelvis: | Abdomen/ Pelvis: | kVp | mA | Time (sec) | Pitch During Measured CTDIvol | Pitch During Clinical Exam | Adult SSDE | | | | | | |
|---------------------|---------------------|-------------------------|-----------|-----------|------------------------------|-------------------------------|---------------------------------|------------------------|-------------------------|---------------------------|---------------------------------------|---|--|--|
| Pelvis: | Pelvis: | Pelvis: | 120 | 200 | 1 | 1.0 | 1.0 | 23 | | | | | | |
| AP Thickness (cm) | LAT Thickness (cm) | Effective Diameter (cm) | Mass (kg) | Age | Limited mAs Reduction Factor | Moderate mAs Reduction Factor | Aggressive mAs Reduction Factor | Limited mAs SSDE (mGy) | Moderate mAs SSDE (mGy) | Aggressive mAs SSDE (mGy) | Limited NB = Adult SSDE Estimated mAs | Moderate NB = 0.75 * Adult SSDE Estimated mAs | Aggressive NB = 0.5 * Adult SSDE Estimated mAs | |
| 10 | 14 | 11.8 | 4 | newborn | 0.52 | 0.39 | 0.25 | 23 | 17 | 11 | 104 | 77 | 50 | |
| 11 | 16 | 13.3 | 10 | 1 yr | 0.55 | 0.42 | 0.29 | 23 | 18 | 12 | 110 | 84 | 59 | |
| 14 | 20 | 16.7 | 18 | 5 yr | 0.62 | 0.50 | 0.39 | 23 | 19 | 15 | 123 | 100 | 78 | |
| 16 | 25 | 20.0 | 33 | 10 yr | 0.70 | 0.62 | 0.53 | 23 | 20 | 18 | 140 | 123 | 106 | |
| 19 | 29 | 23.5 | 54 | 15 yr | 0.80 | 0.74 | 0.68 | 23 | 21 | 20 | 160 | 148 | 137 | |
| 22 | 32 | 26.5 | 65 | 20 yr | 0.89 | 0.86 | 0.83 | 23 | 22 | 22 | 179 | 172 | 165 | |
| 25 | 35 | 29.6 | 75 | med adult | 1.00 | 1.00 | 1.00 | 23 | 23 | 23 | 200 | 200 | 200 | |
| 31 | 41 | 35.7 | 110 | lg adult | 1.21 | 1.28 | 1.35 | 23 | 25 | 27 | 242 | 256 | 270 | |

Table II: mAs Reduction Factors for the Pediatric Head

| Head Baseline: | Head Baseline: | Head Baseline: | kVp | mA | Time (sec) | Pitch During Measured | Pitch During Clinical Exam | | |
|-------------------|--------------------|-------------------------|-----------|-----------|------------------------------|-------------------------------|----------------------------|------------------------|--|
| Head Baseline: | Head Baseline: | Head Baseline: | 120 | 300 | 1.00 | 1.0 | 1.0 | | |
| AP Thickness (cm) | LAT Thickness (cm) | Effective Diameter (cm) | Mass (kg) | Age | Limited mAs Reduction Factor | Moderate mAs Reduction Factor | Limited Estimated mAs | Moderate Estimated mAs | |
| 14 | 12 | 13 | 4 | newborn | 0.74 | 0.38 | 222 | 114 | |
| 16 | 13 | 14.5 | 10 | 1 yr | 0.80 | 0.47 | 240 | 141 | |
| 17 | 14 | 15.5 | 13 | 2 yr | 0.86 | 0.62 | 258 | 186 | |
| 19 | 15 | 17 | 21 | 6 yr | 0.93 | 0.79 | 279 | 237 | |
| 20 | 16 | 18 | 75 | med adult | 1 | 1 | 300 | 300 | |

| Abdomen: | kVp | mA | Time (sec) | Pitch Abdomen | Pitch Thorax |
|-------------------|------------|---------------------------|-------------------------|---------------------------|-------------------------|
| | fill in | fill in | fill in | fill in | fill in |
| PA Thickness (cm) | Approx Age | Abdomen | | Thorax | |
| | | mAs Reduction Factor (RF) | Estimated mAs = BL x RF | mAs Reduction Factor (RF) | Estimated mAs = BL x RF |
| 9 | newborn | 0.43 | #VALUE! | 0.42 | #VALUE! |
| 12 | 1 yr | 0.51 | #VALUE! | 0.49 | #VALUE! |
| 14 | 5 yr | 0.59 | #VALUE! | 0.57 | #VALUE! |
| 16 | 10 yr | 0.66 | #VALUE! | 0.64 | #VALUE! |
| 19 | 15 yr | 0.76 | #VALUE! | 0.73 | #VALUE! |
| 22 | small | 0.90 | #VALUE! | 0.82 | #VALUE! |
| 25 | med adult | 1.0 | fill in | 0.91 | #VALUE! |
| 31 | large | 1.27 | #VALUE! | 1.16 | #VALUE! |